

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*

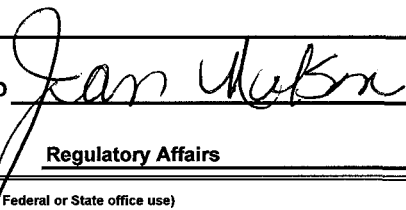
FORM APPROVED
OMB NO. 1040-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN		
TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		
TYPE OF WELL <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE		
2. NAME OF OPERATOR QUESTAR EXPLORATION & PRODUCTION, CO.		Contact: Jan Nelson E-Mail: jan.nelson@questar.com
3. ADDRESS 11002 E. 17500 SO. Vernal, Ut 84078		9. API NUMBER: 43-047-40097
4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*) At Surface 600' FSL 2321' FWL, SESW, SECTION 4, T8S, R22E At proposed production zone 1500' FNL 1750' FEL, SWNE, SECTION 9, T8S, R22E		10. FIELD AND POOL, OR WILDCAT WHITE RIVER 105
14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE* 34 +/- MILES SOUTH OF VERNAL, UTAH		11. SEC., T, R, M, OR BLK & SURVEY OR AREA SEC. 4, T8S, R22E Mer SLB&M
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (also to nearest drig, unit line if any) 600' +/-	16. NO. OF ACRES IN LEASE 160.00	12. COUNTY OR PARISH Uintah
18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft	19. PROPOSED DEPTH 8,097'	13. STATE UT
21. ELEVATIONS (Show whether DF, RT, GR, ect.) 5167.9' GR	22. DATE WORK WILL START ASAP	17. NO. OF ACRES ASSIGNED TO THIS WELL 40
20. BLM/BIA Bond No. on file ESB000024		
23. Estimated duration 40 Days		
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A surface Use Plan (if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

SIGNED



Name (printed/typed) Jan Nelson

DATE 05/22/2008

TITLE Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO.

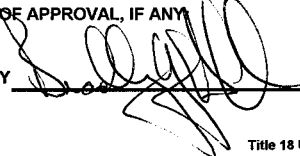
43-047-40097

APPROVAL DATE

Application approval does not warrant or certify the applicant holds any legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

CONDITIONS OF APPROVAL, IF ANY

APPROVED BY



TITLE

BRADLEY G. HILL
ENVIRONMENTAL MANAGER

DATE

05-29-08

*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

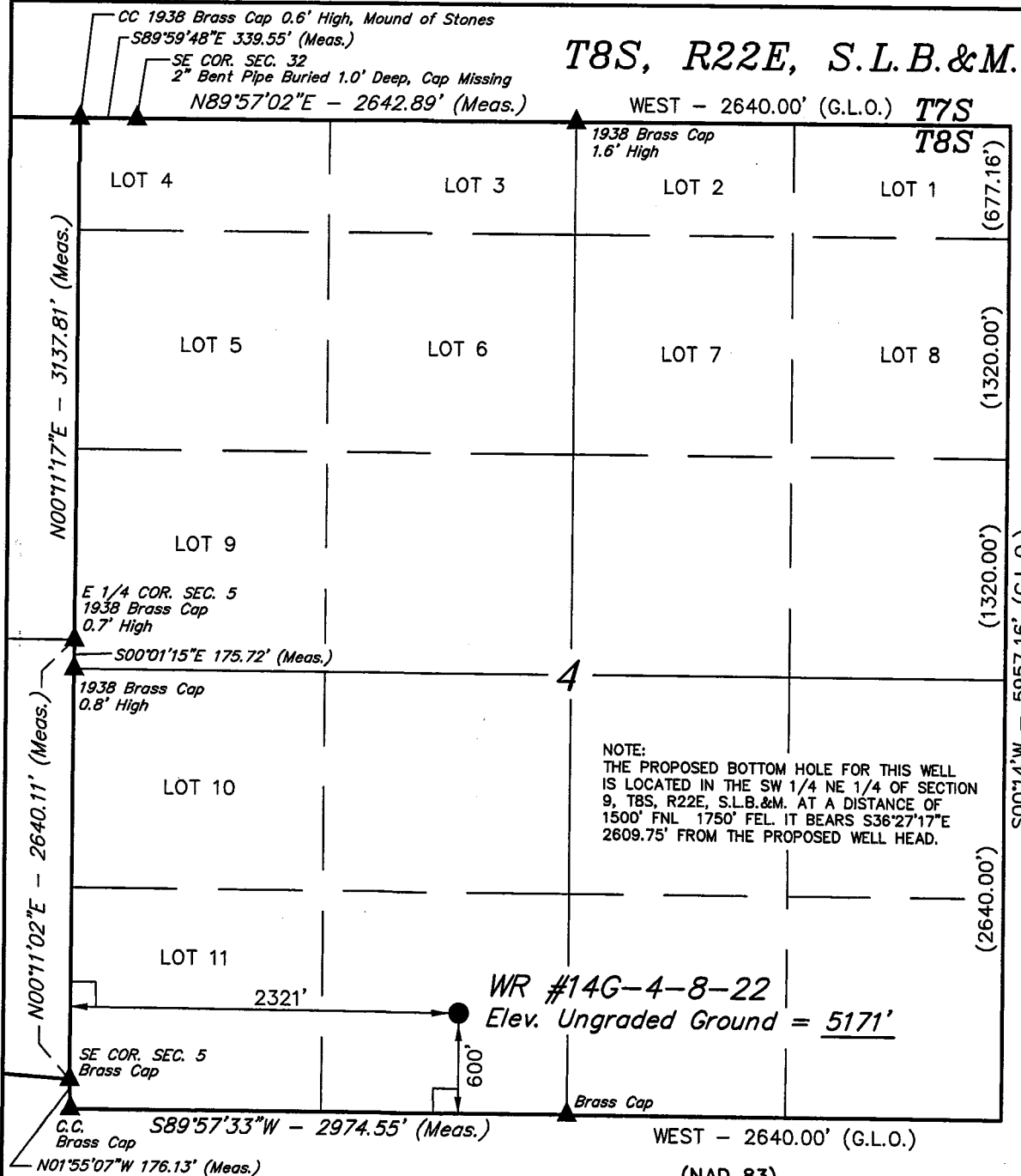
CONFIDENTIAL

RECEIVED

MAY 27 2008

DIV. OF OIL, GAS & MINING

Federal Approval of this
Action is NecessarySurf
632342X
4444944Y
40.146318
109.446114BHL
632798X
4444302Y
40.140460
109.441128



LEGEND:

└─ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)
 LATITUDE = 40°08'45.77" (40.146047)
 LONGITUDE = 109°26'50.67" (109.447408)

(NAD 27)
 LATITUDE = 40°08'45.90" (40.146083)
 LONGITUDE = 109°26'48.20" (109.446722)

QUESTAR EXPLR. & PROD.

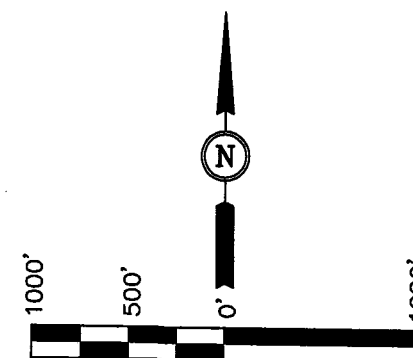
Well location, WR #14G-4-8-22, located as shown in the SE 1/4 SW 1/4 of Section 4, T8S, R22E, S.L.B.&M, Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

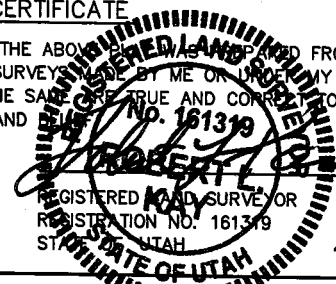
BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE
 CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



UINTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 10-10-07	DATE DRAWN: 10-16-07
PARTY D.A. T.M. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXPLR. & PROD.	

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. **Formation Tops**

The estimated top of important geologic markers are as follows:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	2,980'	3,450'
Kick Off Point	5,214'	5,214'
Green River (G1 Lime)	5,691'	5,928'
TD	5,636'	8,097'

2. **Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	Green River (G1 Lime)	5,691' – 5,636'	5,928' – 8,097'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right A36125 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. Operator's Specification for Pressure Control Equipment

- A. 3,000 psi double gate, 3,000 psi annular (schematic attached)
- B. Function test daily.
- C. All casing strings shall be pressure tested (0.22 psi/ft or 1,500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield of the casing.
- D. Ram type preventers and associated equipment shall be tested to rated working pressure if isolated by a test plug or to 50% of the internal yield pressure of casing, whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 3M system and individual components shall be operable as designed.

4. Casing Program

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, Lb/ft	Grade	Thread	Condition
17 1/2"	14"	sfc	40'	Steel	Cond	None	Used
12 1/4"	9 5/8"	sfc	480'	36.0	J-55	STC	New
8 3/4"	7"	sfc	5,989'	26.0	L-80	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	L-80	LTC	5,410 psi	7,240 psi	511,000 lb.

The lateral portion of this wellbore will be cased with a slotted liner.

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight	Grade
6 1/8"	4 1/2"	5,689'	8,097'	11.6	J-55

Please refer to the attached wellbore diagram and re-entry procedure for further details.

5. Cementing Program

20" Conductor:

Cement to surface with construction cement.

9-5/8" Surface Casing: sfc – 480' (MD)

Lead/Tail Slurry: 0' – 480'. 170 sks (310 cu ft) Rockies LT cement + 0.25 lb/sk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft³/sk, Slurry volume: 12-1/4" hole + 100% excess.

7" Intermediate Casing: sfc - 5,989' (MD)

Lead/Tail Slurry: 3,989' – 5,989'. 305 sks (380 cu ft) 50/50 Poz Premium + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.125 lb/sk Poly-E-Flake. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft³/sk, Slurry volume: 8-3/4" hole + 25% excess.

4 1/2" Slotted Liner: 5,689' – 8,097' (MD)

No cement, dropped in open hole.

6. Auxilliary Equipment

- A. Kelly Cock – Yes
- B. Float at the bit – No
- C. Monitoring equipment on the mud system – visually and/or PVT or Flow Show
- D. Fully opening safety valve on the rig floor – Yes
- E. Rotating Head – Yes

If drilling with air the following will be used:

- F. The blooie line shall be at least 6" in diameter and extend at least 100' from the wellbore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500')
- H. Compressor shall be tied directly to the blooie line through a manifold
- I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Drilling the surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III requirements, subsection E Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is less than 500 feet and high pressures are not expected.

- a. **Properly lubricated and maintained rotating head.** A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
- b. **Blooi line discharge 100' from well bore and securely anchored.** The blooi line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
- c. **Automatic ignitor or continuous pilot light on the blooi line.** A diffuser will be used rather than an automatic pilot/ignitor. Water is injected into the compressed air and eliminates the need for the pilot light and the need for dust suppression equipment.
- d. **Compressors located in the opposite direction from the blooi line a minimum of 100 feet from the well bore.** Compressors located 50 feet on the opposite side of the well bore from the blooi line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valve on the compressor, 3) spark arrestors on the motors.

Drilling of the laterals will be done with fresh water NaCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and NaCl. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used the concentration will be less than 4% by volume. Maximum anticipated mud weight is 10.0 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow show will be used upon exit of surface casing to TD.

Gas detector will be used upon exit of surface casing to TD.

7. **Testing, Logging, and Coring Program**

- A. Cores – None Anticipated
- B. DST – None Anticipated

C. Logging:

- i. Mud logging from casing exit to TD
- ii. MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the lateral within the desired zone.

- D. Formation and completion interval: H4a Lime interval, final determination of completion will be made by analysis of mud logging data. Stimulation: stimulation will be designed for the particular area of interest encountered.

8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered or is known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom-hole pressure equals approximately 2,800 psi. Maximum anticipated bottom hole temperature is approximately 120°F.

QUESTAR EXPLORATION & PRODUCTION, CO.
WRU GB 14G-4-8-22
Surface 600' FSL 2321' FWL, SESW, SEC. 4, T8S, R22E
BHL 1500' FNL 1750' FEL, SEC. 9, T8S, R22E
UINTAH COUNTY, UTAH
LEASE # UTU-0971

ONSHORE ORDER NO. 1

MULTI – POINT SURFACE USE & OPERATIONS PLAN

An onsite inspection was conducted for the WRU GB 14G-4-8-22 on April 1, 2008. Weather conditions were cold at the time of the onsite. In attendance at the inspection were the following individuals:

Holly Villa	Bureau of Land Management
Amy Torres	Bureau of Land Management
Don Allred	Uintah Engineering & Land Surveying
Raymond Pallesen	Questar Exploration & Production, Co.
Jan Nelson	Questar Exploration & Production, Co.

1. Existing Roads:

The proposed well site is approximately 34 miles South of Vernal, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

There will be no improvements made to existing road.

2. Planned Access Roads:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Township 08 South, Ranges 22 East.

Refer to Topo Map B for the location of the proposed access road.

3. Location of Existing Wells Within a 1 – Mile Radius:

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Township 08 South, Ranges 22 East.

Refer to Topo Map D for the location of the proposed pipeline.

5. Location and Type of Water Supply:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Water for drilling purposes would be obtained from Wonsits Valley Water Right # A 36125 (which was filed on May 7, 1964) or Red Wash Water Right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System.

6. Source of Construction Materials:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

7. Methods of Handling Waste Materials:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

8. Ancillary Facilities:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Product will be tanked and hauled to delivery site.

Facilities will be painted Carlsbad Canyon

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A felt pit liner will be required if bedrock is encountered.

10. Plans for Reclamation of the Surface:

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Interim Reclamation

Please see attached Interim Reclamation plan.

Once the well is put onto production, QEP will reclaim as much of the well pad as possible that will allow for operations to continue in a safe and reasonable manner. Reseeding will be done in the spring or fall of every year to allow winter precipitation to aid in the success of reclamation.

Seed Mix:

Interim Reclamation:

6 lbs Hycrest Crested Wheatgrass

6 lbs Needle & Threadgrass

Final Reclamation:

Seed Mix # 3 3 lbs. Shadscale, 3 lbs. Indian Rice Grass, 3 lbs. Needle & Threadgrass

4 lbs. Hycrest Crested Wheat

11. Surface Ownership:

Bureau of Land Management

170 South 500 East

Vernal, Utah 84078

(435) 781-4400

12. Other Information

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

A class III paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted directly to the appropriate agencies by Stephen D. Sandau. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide paleo monitor if needed.

There is a Burrowing Owl Stipulation from March 1 thru August 15. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

There is a Red Tailed Hawk Stipulation from March 15 thru August 15. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

Lessee's or Operator's Representative:

Jan Nelson
Red Wash Rep.
Questar Exploration & Production, Co.
11002 East 17500 South
Vernal, Utah 84078
(435) 781-4331

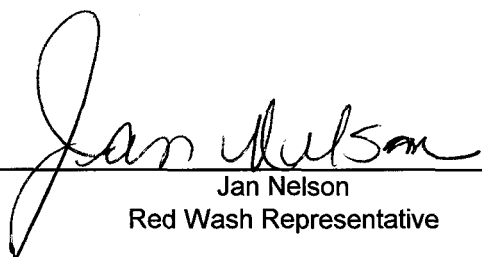
Certification:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

Questar Explor. & Prod. Co. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Questar Explor. & Prod. Co. it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.



Jan Nelson
Red Wash Representative

5/22/2008

Date

Additional Operator Remarks

Questar Exploration & Production Company proposes to drill a horizontal well to test the Green River formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements"

See Onshore Oil & Gas Order No. 1

Please see Questar Exploration & Production Company Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench and undesignated fields in Township 08 South, Ranges 22East.

Please be advised that Questar Exploration & Production Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is Questar Exploration & Production Company via surety as consent as provided for the 43 CFR 3104.2.

QUESTAR EXPLORATION AND PRODUCTION

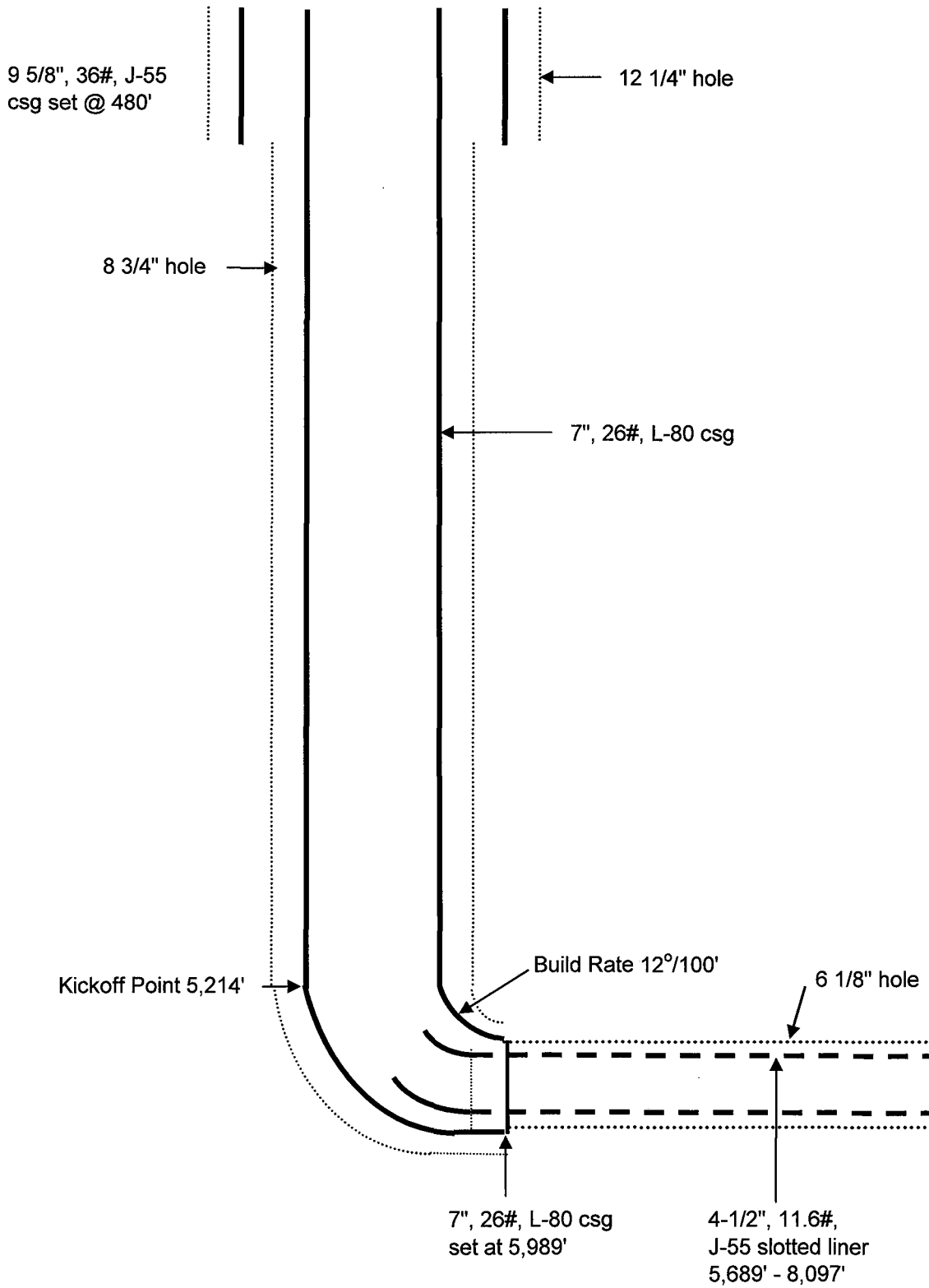
WR 14G-4-8-22

New Horizontal Well

Summarized Procedure

1. MIRU air rig.
2. Drill 12 1/4" surface hole to 480'±.
3. Run 9 5/8", 36#, J-55, STC casing and cement to surface.
4. RD air rig, move off location.
5. MIRU drilling rig.
6. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
7. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
8. Drill 8 3/4" hole to 5,000'.
9. TOOH, PU directional BHA, TIH.
10. Drill to 5,214', kick off and drill well at a 143.54° azimuth with 12°/100' build rates to land in G1 Lime formation at a TVD of +/- 5,692', 5,977' MD.
11. Drill in zone to 5,989' MD. TOOH, LDDP.
12. PU and run 7", 26#, L-80, LTC casing to 5,989', cement casing.
13. PU 3 1/2" DP, directional BHA, TIH.
14. Drill +/- 2,110' of lateral in G1 Lime.
 - a. Mud system to be a KCl weighted water based mud, weights are expected to be in the 9.0 – 10.0 ppg range.
15. Circulate and condition hole, TOOH, LD 2,400' DP.
 - a. PU 2,110' of 4-1/2" slotted liner, 300' of blank liner and liner dropping tool.
 - b. RIH w/ liner and dropping tool, drop liner at 5,689'.
 - c. LDDP.
16. RU wireline, RIH and set RBP @ +/- 4,500' to isolate lateral.
17. ND BOP's.
18. RDMO.

WR 14G-4-8-22





Questar Exploration & Production

**Uintah Co., UT
Sec.4-T8S-R22E
WR 14G-4-8-22
Wellbore #1**

Plan: Plan #1

Pathfinder Planning Report

13 November, 2007



Database: EDM 2003.16 Single User Db
Company: Questar Exploration & Production
Project: Uintah Co., UT
Site: Sec.4-T8S-R22E
Well: WR 14G-4-8-22
Wellbore: Wellbore #1
Design: Plan #1

Local Co-ordinate Reference: Well WR 14G-4-8-22
TVD Reference: WELL (copy) @ 5185.0ft (Original Well Elev)
MD Reference: WELL (copy) @ 5185.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Uintah Co., UT		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	Sec.4-T8S-R22E		
Site Position:		Northing:	7,228,505.74 ft
From:	Lat/Long	Easting:	2,214,150.03 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 8' 45.769 N
		Longitude:	109° 26' 50.669 W
		Grid Convergence:	1.31 °

Well	WR 14G-4-8-22		
Well Position	+N/-S	0.0 ft	Northing: 7,228,505.74 ft
	+E/-W	0.0 ft	Easting: 2,214,150.03 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 8' 45.769 N
		Longitude:	109° 26' 50.669 W
		Ground Level:	5,174.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	11/13/2007	(°)
			11.52
		Dip Angle	(°)
		66.10	
		Field Strength	(nT)
		52,793	

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	5,636.2	0.0	0.0
			Direction
			(°)
			143.54

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,214.4	0.00	0.00	5,214.4	0.0	0.0	0.00	0.00	0.00	0.00	
5,976.9	91.50	143.54	5,691.7	-394.1	291.2	12.00	12.00	0.00	143.54	
8,097.4	91.50	143.54	5,636.2	-2,098.9	1,550.9	0.00	0.00	0.00	0.00	PBHL WR 14G-4-8-22

Database: EDM 2003.16 Single User Db
 Company: Questar Exploration & Production
 Project: Uintah Co., UT
 Site: Sec.4-T8S-R22E
 Well: WR 14G-4-8-22
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well WR 14G-4-8-22
 WELL (copy) @ 5185.0ft (Original Well Elev)
 WELL (copy) @ 5185.0ft (Original Well Elev)
 True
 Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
KOP / Start Build 12.00°									
5,214.4	0.00	0.00	5,214.4	0.0	0.0	0.0	0.00	0.00	0.00
5,225.0	1.27	143.54	5,225.0	-0.1	0.1	0.1	12.00	12.00	0.00
5,250.0	4.27	143.54	5,250.0	-1.1	0.8	1.3	12.00	12.00	0.00
5,275.0	7.27	143.54	5,274.8	-3.1	2.3	3.8	12.00	12.00	0.00
5,300.0	10.27	143.54	5,299.5	-6.2	4.5	7.7	12.00	12.00	0.00
5,325.0	13.27	143.54	5,324.0	-10.3	7.6	12.8	12.00	12.00	0.00
5,350.0	16.27	143.54	5,348.2	-15.4	11.4	19.1	12.00	12.00	0.00
5,375.0	19.27	143.54	5,372.0	-21.5	15.9	26.8	12.00	12.00	0.00
5,400.0	22.27	143.54	5,395.4	-28.6	21.2	35.6	12.00	12.00	0.00
5,425.0	25.27	143.54	5,418.2	-36.8	27.2	45.7	12.00	12.00	0.00
5,450.0	28.27	143.54	5,440.6	-45.8	33.8	57.0	12.00	12.00	0.00
5,475.0	31.27	143.54	5,462.3	-55.8	41.2	69.4	12.00	12.00	0.00
5,500.0	34.27	143.54	5,483.3	-66.7	49.3	82.9	12.00	12.00	0.00
5,525.0	37.27	143.54	5,503.6	-78.4	57.9	97.5	12.00	12.00	0.00
5,550.0	40.27	143.54	5,523.0	-91.0	67.3	113.2	12.00	12.00	0.00
5,575.0	43.27	143.54	5,541.7	-104.4	77.1	129.8	12.00	12.00	0.00
5,600.0	46.27	143.54	5,559.4	-118.6	87.6	147.4	12.00	12.00	0.00
5,625.0	49.27	143.54	5,576.2	-133.5	98.6	165.9	12.00	12.00	0.00
5,650.0	52.27	143.54	5,592.0	-149.0	110.1	185.3	12.00	12.00	0.00
5,675.0	55.27	143.54	5,606.8	-165.2	122.1	205.5	12.00	12.00	0.00
5,700.0	58.27	143.54	5,620.5	-182.1	134.5	226.4	12.00	12.00	0.00
5,725.0	61.27	143.54	5,633.1	-199.4	147.4	248.0	12.00	12.00	0.00
5,750.0	64.27	143.54	5,644.5	-217.3	160.6	270.2	12.00	12.00	0.00
5,775.0	67.27	143.54	5,654.8	-235.6	174.1	293.0	12.00	12.00	0.00
5,800.0	70.27	143.54	5,663.8	-254.4	188.0	316.3	12.00	12.00	0.00
5,825.0	73.27	143.54	5,671.7	-273.5	202.1	340.0	12.00	12.00	0.00
5,850.0	76.27	143.54	5,678.2	-292.9	216.4	364.2	12.00	12.00	0.00
5,875.0	79.27	143.54	5,683.5	-312.5	230.9	388.6	12.00	12.00	0.00
5,900.0	82.27	143.54	5,687.5	-332.4	245.6	413.3	12.00	12.00	0.00
5,925.0	85.27	143.54	5,690.2	-352.4	260.4	438.1	12.00	12.00	0.00
G1 Lime Top Porosity									
5,927.7	85.60	143.54	5,690.5	-354.5	262.0	440.8	12.00	12.00	0.00
5,950.0	88.27	143.54	5,691.6	-372.4	275.2	463.1	12.00	12.00	0.00
Start 2120.5 hold at 5976.9 MD									
5,976.9	91.50	143.54	5,691.7	-394.1	291.2	490.0	12.00	12.00	0.00
7" Casing									
5,988.5	91.50	143.54	5,691.4	-403.4	298.1	501.6	0.00	0.00	0.00
6,000.0	91.50	143.54	5,691.1	-412.6	304.9	513.1	0.00	0.00	0.00
6,100.0	91.50	143.54	5,688.5	-493.0	364.3	613.0	0.00	0.00	0.00
6,200.0	91.50	143.54	5,685.9	-573.4	423.7	713.0	0.00	0.00	0.00
6,300.0	91.50	143.54	5,683.2	-653.8	483.1	813.0	0.00	0.00	0.00
6,400.0	91.50	143.54	5,680.6	-734.2	542.5	912.9	0.00	0.00	0.00
6,500.0	91.50	143.54	5,678.0	-814.6	601.9	1,012.9	0.00	0.00	0.00
6,600.0	91.50	143.54	5,675.4	-895.0	661.3	1,112.8	0.00	0.00	0.00
6,700.0	91.50	143.54	5,672.8	-975.4	720.7	1,212.8	0.00	0.00	0.00
6,800.0	91.50	143.54	5,670.2	-1,055.8	780.1	1,312.8	0.00	0.00	0.00
6,900.0	91.50	143.54	5,667.5	-1,136.2	839.5	1,412.7	0.00	0.00	0.00
7,000.0	91.50	143.54	5,664.9	-1,216.6	898.9	1,512.7	0.00	0.00	0.00
7,100.0	91.50	143.54	5,662.3	-1,297.0	958.4	1,612.7	0.00	0.00	0.00
7,200.0	91.50	143.54	5,659.7	-1,377.4	1,017.8	1,712.6	0.00	0.00	0.00
7,300.0	91.50	143.54	5,657.1	-1,457.8	1,077.2	1,812.6	0.00	0.00	0.00
7,400.0	91.50	143.54	5,654.4	-1,538.2	1,136.6	1,912.6	0.00	0.00	0.00

Database: EDM 2003.16 Single User Db
 Company: Questar Exploration & Production
 Project: Uintah Co., UT
 Site: Sec.4-T8S-R22E
 Well: WR 14G-4-8-22
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well WR 14G-4-8-22
 WELL (copy) @ 5185.0ft (Original Well Elev)
 WELL (copy) @ 5185.0ft (Original Well Elev)
 True
 Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,500.0	91.50	143.54	5,651.8	-1,618.6	1,196.0	2,012.5	0.00	0.00	0.00
7,600.0	91.50	143.54	5,649.2	-1,699.0	1,255.4	2,112.5	0.00	0.00	0.00
7,700.0	91.50	143.54	5,646.6	-1,779.4	1,314.8	2,212.5	0.00	0.00	0.00
7,800.0	91.50	143.54	5,644.0	-1,859.8	1,374.2	2,312.4	0.00	0.00	0.00
7,900.0	91.50	143.54	5,641.4	-1,940.2	1,433.6	2,412.4	0.00	0.00	0.00
8,000.0	91.50	143.54	5,638.7	-2,020.6	1,493.0	2,512.4	0.00	0.00	0.00
TD at 8097.4 - PBHL WR 14G-4-8-22									
8,097.4	91.50	143.54	5,636.2	-2,098.9	1,550.9	2,609.7	0.00	0.00	0.00

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL WR 14G-4-8-22	0.00	0.00	5,636.2	-2,098.9	1,550.9	7,226,442.98	2,215,748.69	40° 8' 25.025 N	109° 26' 30.698 W
- plan hits target									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
5,988.5	5,691.4	7" Casing	7	8-3/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,927.7	5,702.0	G1 Lime Top Porosity		-1.50	143.54
	5,706.0	G1 Lime Bottom Porosity		-1.50	143.54

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
5,214.4	5,214.4	0.0	0.0	KOP / Start Build 12.00°
5,976.9	5,691.7	-394.1	291.2	Start 2120.5 hold at 5976.9 MD
8,097.4	5,636.2	-2,098.9	1,550.9	TD at 8097.4



Company: Questar Exploration & Production
Field: Uintah Co., UT
Location: Sec.4-T8S-R22E
Well: WR 14G-4-8-22
Wellbore #1
Plan: Plan #1 (WR 14G-4-8-22/Wellbore #1)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5214.4	0.00	0.00	5214.4	0.0	0.0	0.00	0.00	0.0	
3	5976.9	91.50	143.54	5691.7	-394.1	291.2	12.00	143.54	490.0	
4	8097.4	91.50	143.54	5636.2	-2098.9	1550.9	0.00	0.00	2609.7	PBHL WR 14G-4-8-22

WELL DETAILS: WR 14G-4-8-22

+N/-S	+E/-W	Ground Level:	5174.0
0.0	0.0	Northing	7228505.74
		Easting	2214150.03
		Latitude	40° 8' 45.769 N
		Longitude	109° 28' 50.669 W
		Slot	

WELLBORE TARGET DETAILS

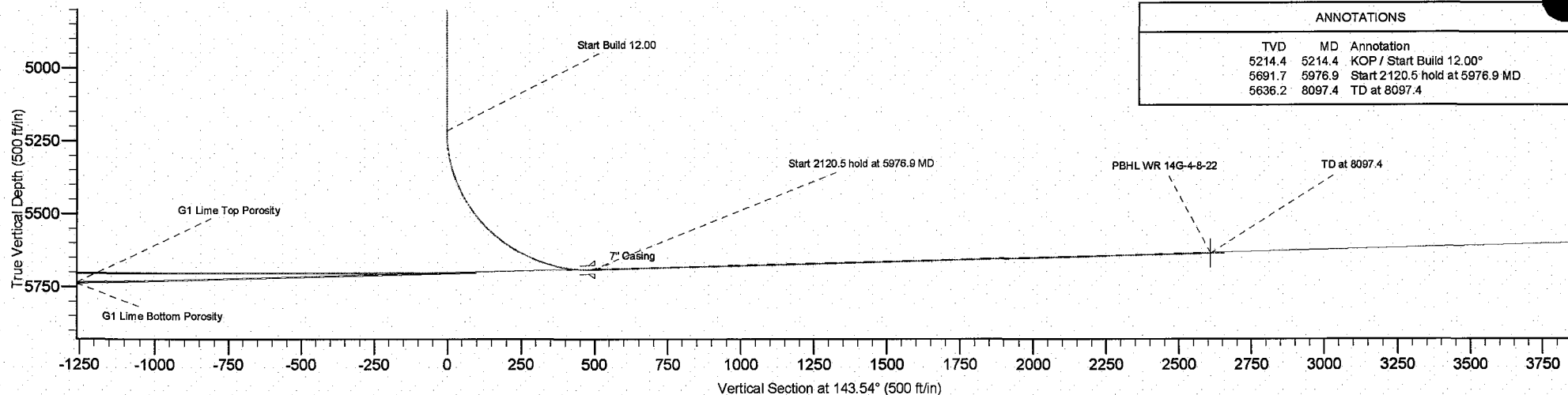
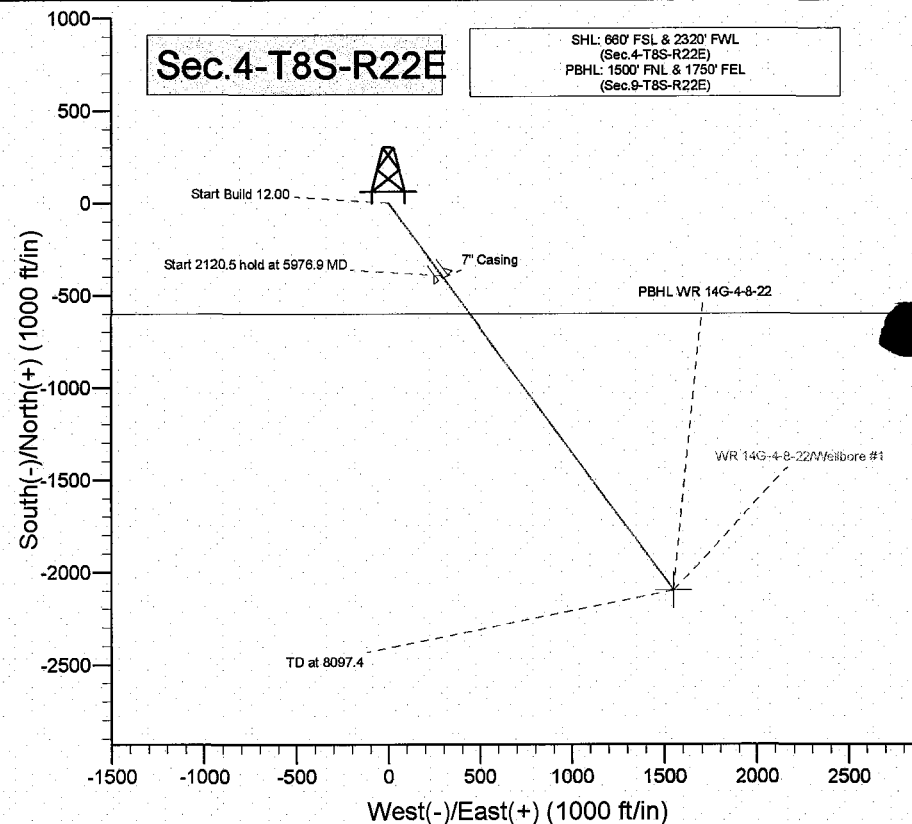
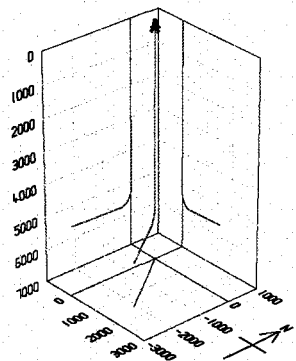
Name	TVD	+N/-S	+E/-W	Shape
PBHL WR 14G-4-8-22	5636.2	-2098.9	1550.9	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5690.5	5927.7	G1 Lime Bottom Porosity
		G1 Lime Top Porosity



Azimuths to True North
Magnetic North: 11.52°
Magnetic Field
Strength: 52793.4nT
Dip Angle: 86.10°
Date: 11/13/2007
Model: IGRF200510



ANNOTATIONS

TVD	MD	Annotation
5214.4	5214.4	KOP / Start Build 12.00°
5691.7	5976.9	Start 2120.5 hold at 5976.9 MD
5636.2	8097.4	TD at 8097.4

QUESTAR EXPLR. & PROD.

WR #14G-4-8-22

LOCATED IN UINTAH COUNTY, UTAH
SECTION 4, T8S, R22E, S.L.B.&M.

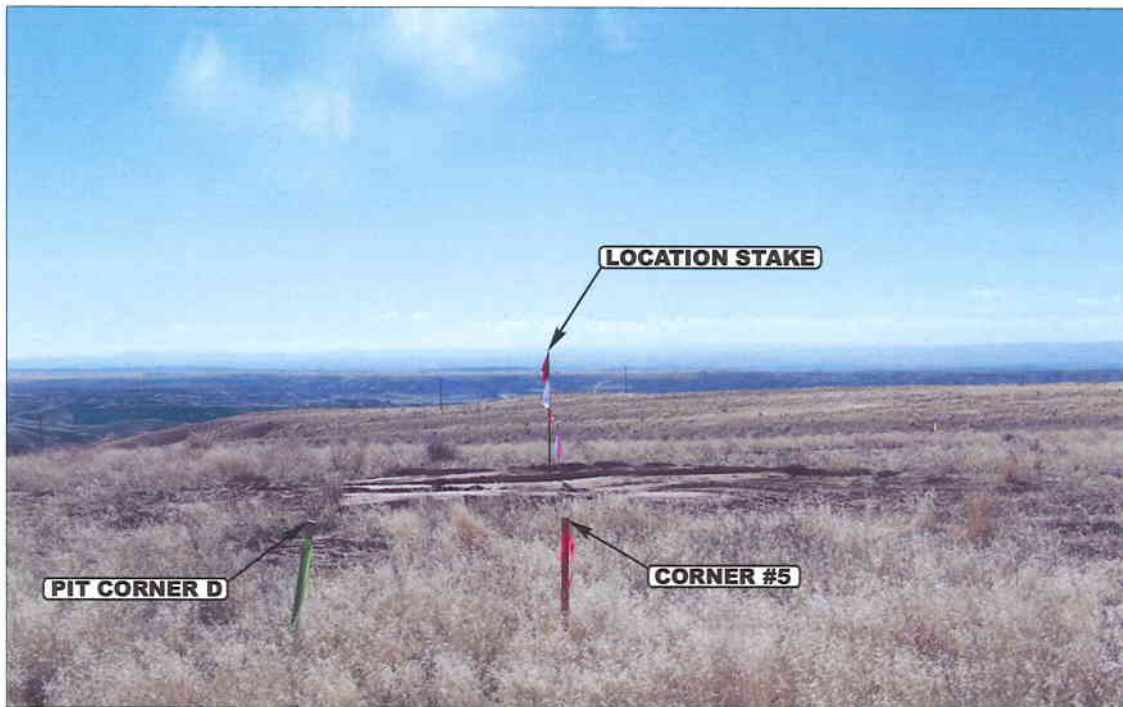


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

10 11 07
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

DRAWN BY: Z.L.

REVISED: 00-00-00

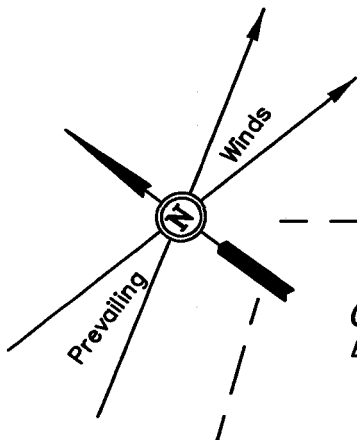
QUESTAR EXPLR. & PROD.

FIGURE #1

LOCATION LAYOUT FOR

WR #14G-4-8-22
SECTION 4, T8S, R22E, S.L.B.&M.
— 600' FSL 2321' FWL —

Reclaimed Area

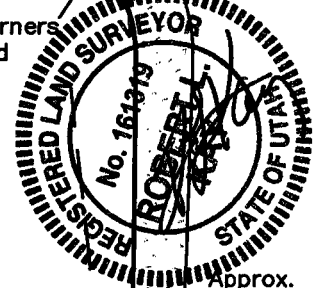


SCALE: 1" = 50'
DATE: 10-12-07
Drawn By: S.L.

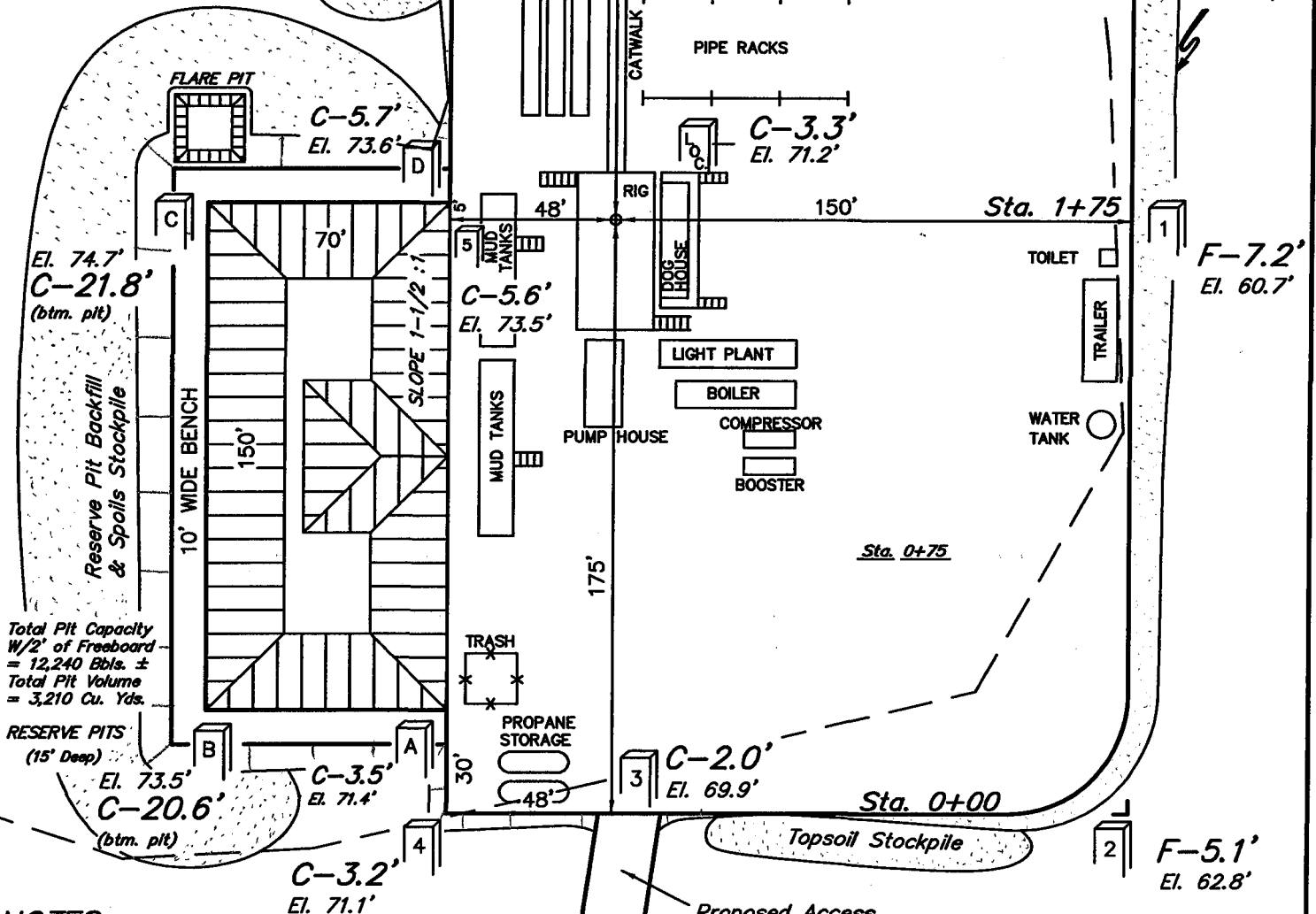
NOTE:
Flare Pit is to be located
a min. of 100' from the
Well Head.

Approx.
Top of
Cut Slope

Pit Topsoil



Approx.
Toe of
Fill Slope



NOTES:

Elev. Ungraded Ground At Loc. Stake = 5171.2'
FINISHED GRADE ELEV. AT LOC. STAKE = 5167.9'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

QUESTAR EXPLR. & PROD.

FIGURE #2

TYPICAL CROSS SECTIONS FOR

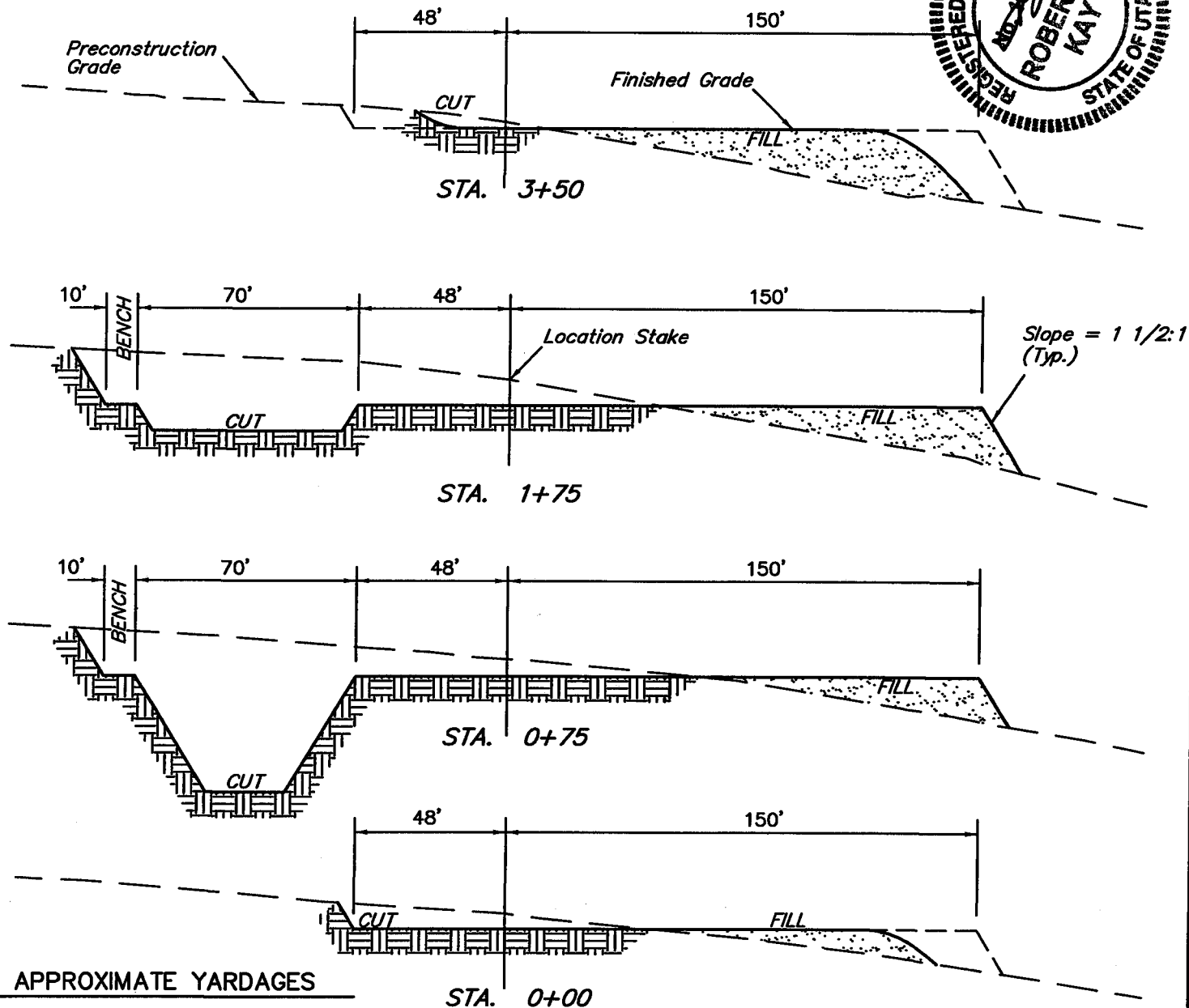
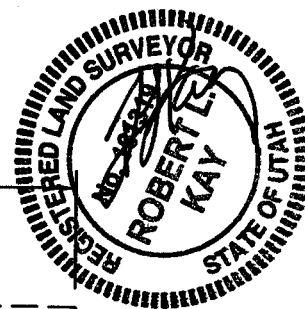
WR #14G-4-8-22

SECTION 4, T8S, R22E, S.L.B.&M.

600' FSL 2321' FWL

X-Section
Scale
1" = 50'

DATE: 10-12-07
Drawn By: S.L.



APPROXIMATE YARDAGES

CUT		
(6") Topsoil Stripping	=	1,770 Cu. Yds.
Remaining Location	=	8,070 Cu. Yds.
TOTAL CUT	=	9,840 CU.YDS.
FILL	=	6,460 CU.YDS.
Excess Material	=	3,380 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	3,380 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	0 Cu. Yds.

NOTE:

Topsoil should not be
Stripped Below Finished
Grade on Substructure Area.

* NOTE:

FILL QUANTITY INCLUDES
5% FOR COMPACTION

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ±2.108 ACRES
ACCESS ROAD DISTURBANCE = ±1.702 ACRES
PIPELINE DISTURBANCE = ±1.443 ACRES

TOTAL = ±5.253 ACRES

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

QUESTAR EXPLR. & PROD.

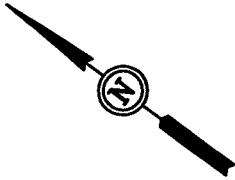
FIGURE #3

INTERIM RECLAMATION PLAN FOR

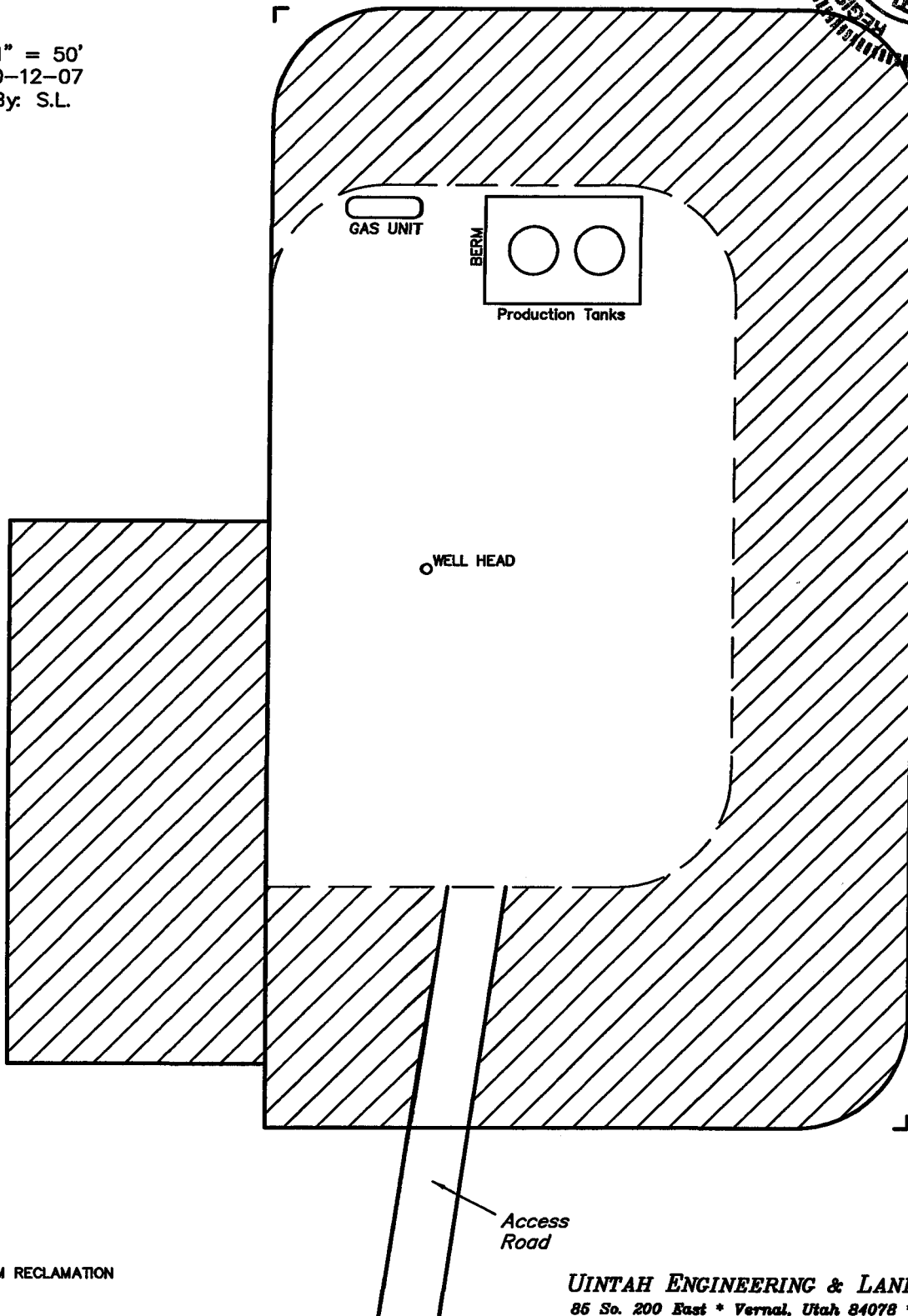
WR #14G-4-8-22

SECTION 4, T8S, R22E, S.L.B.&M.

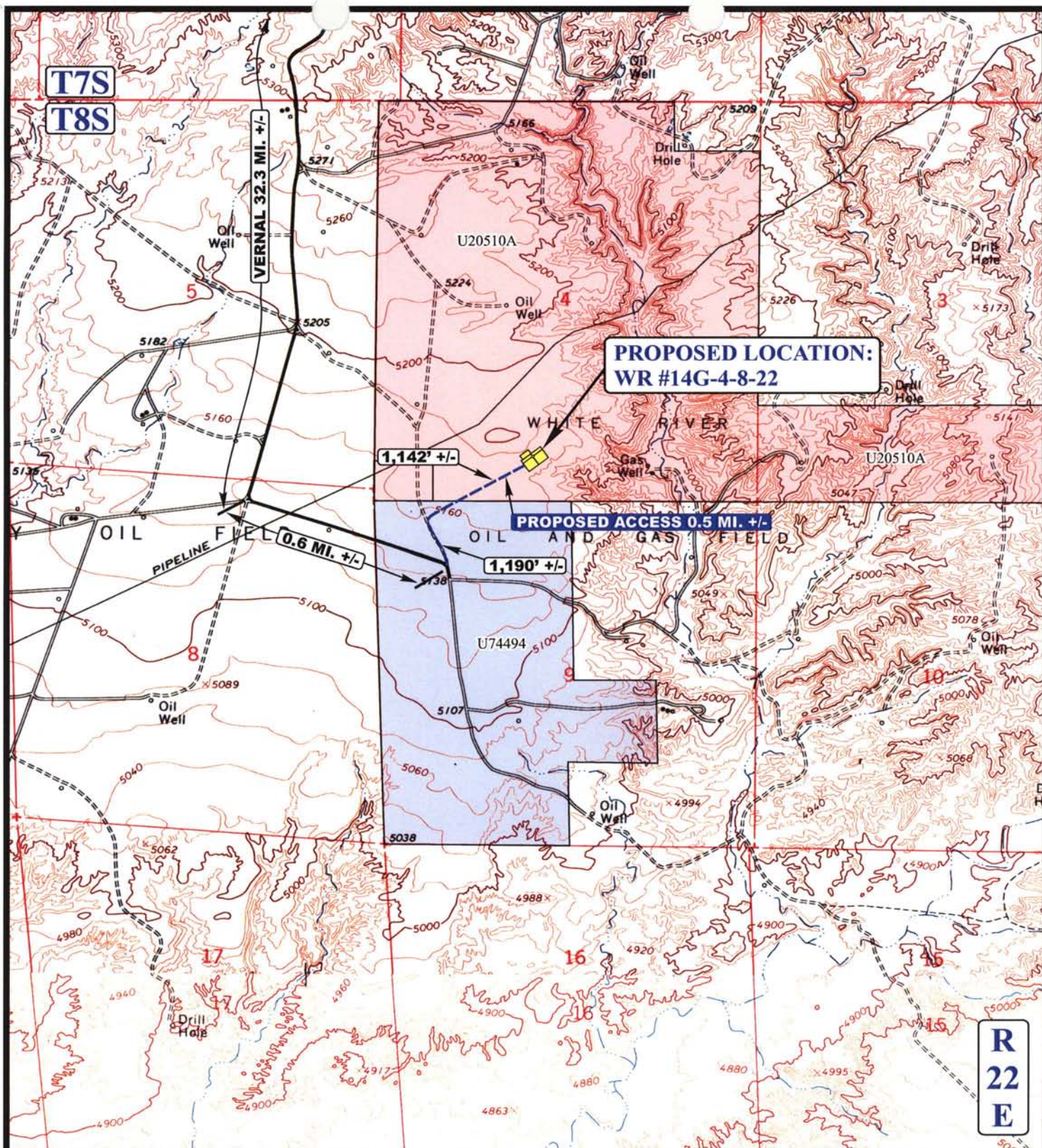
600' FSL 2321' FWL



SCALE: 1" = 50'
DATE: 10-12-07
Drawn By: S.L.



INTERIM RECLAMATION



LEGEND:

EXISTING ROAD
 PROPOSED ACCESS

QUESTAR EXPLR. & PROD.

WR #14G-4-8-22
 SECTION 4, T8S, R22E, S.L.B.&M.
 600' FSL 2321' FWL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

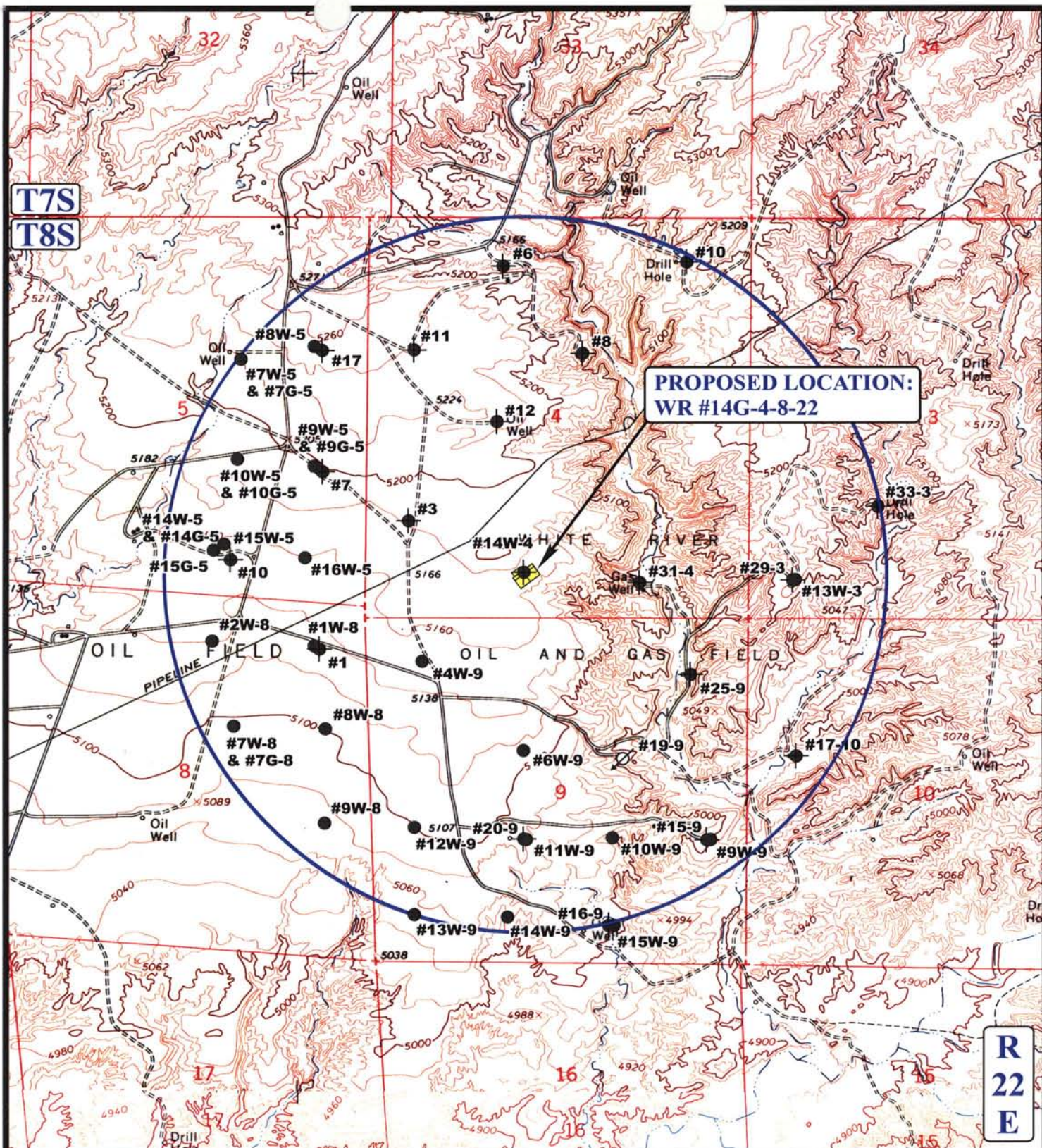


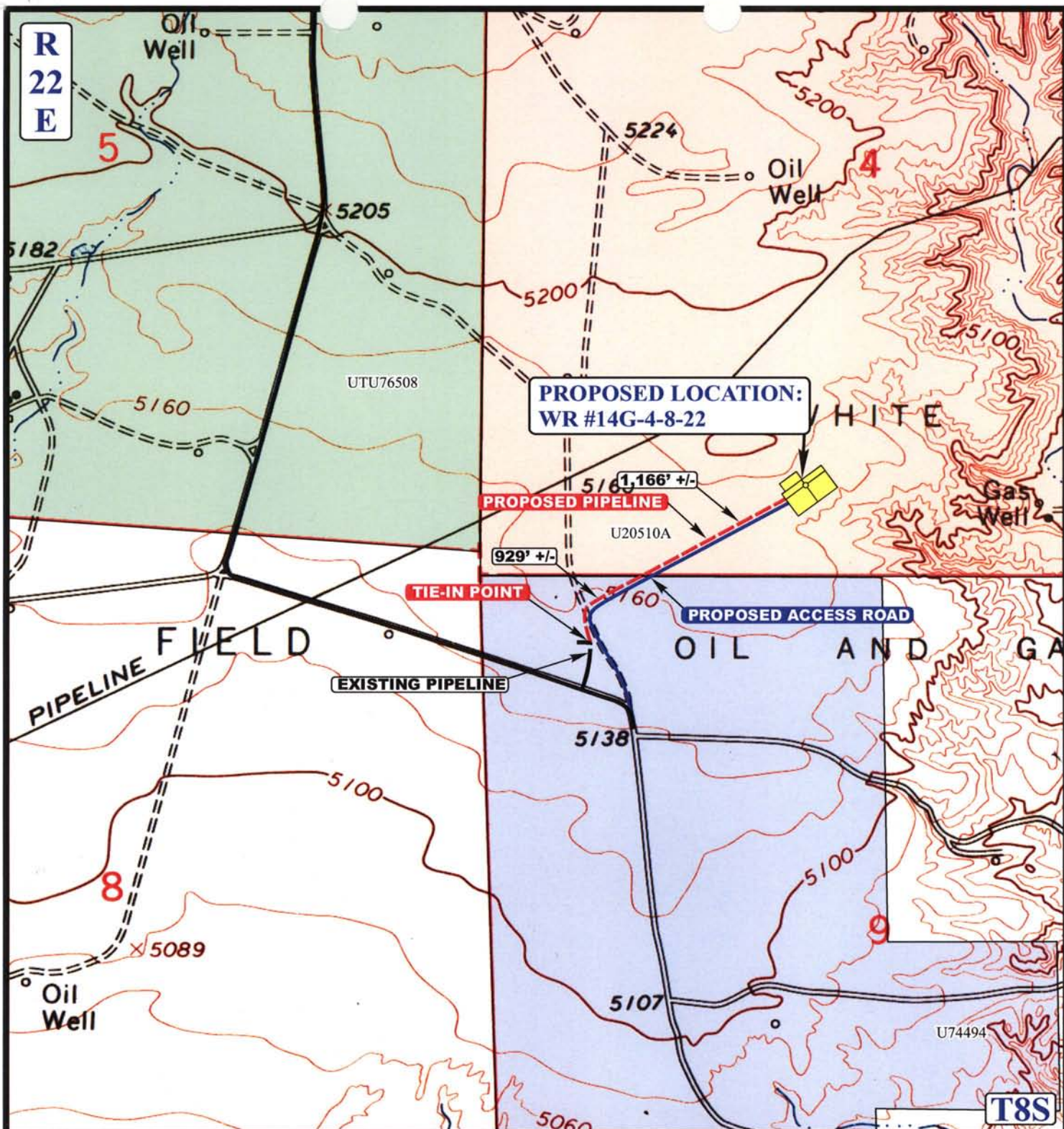
TOPOGRAPHIC
 MAP

10 11 07
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 00-00-00

B
 TOPO





APPROXIMATE TOTAL PIPELINE DISTANCE = 2,095' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- - - - - EXISTING PIPELINE
- - - - - PROPOSED PIPELINE

QUESTAR EXPLR. & PROD.

WR #14G-4-8-22
SECTION 4, T8S, R22E, S.L.B.&M.
600' FSL 2321' FWL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC
MAP

10 11 07
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: Z.L. REVISED: 00-00-00



DRILLING PROGRAM

SCHEMATIC DIAGRAM OF 3,000 PSI BOP STACK

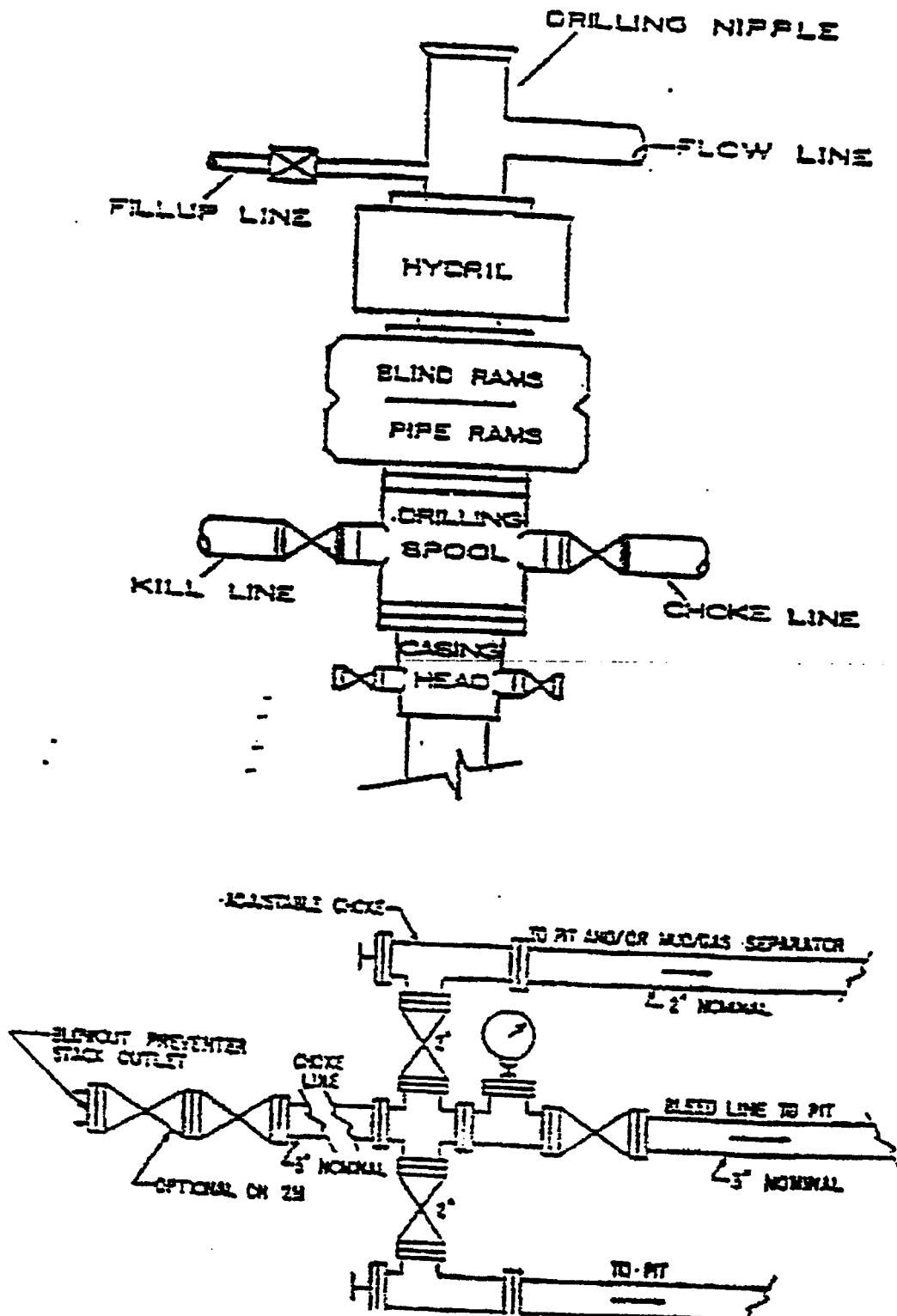
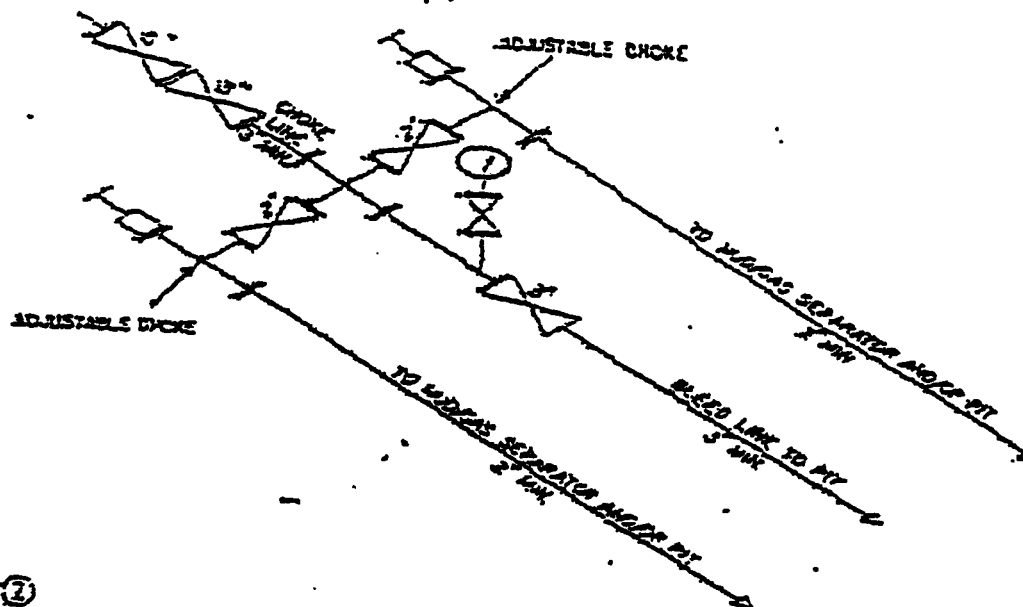


EXHIBIT A CONTINUED

46312

Federal Register / Vol. 33, No. 223 / Friday, November 18, 1966 / Rules and Regulations



② 3M CHOKES MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES
MAY VARY

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 05/27/2008

API NO. ASSIGNED: 43-047-40097

WELL NAME: WRU GB 14G-4-8-22

OPERATOR: QUESTAR EXPLORATION & (N5085)

PHONE NUMBER: 435-781-4031

CONTACT: JAN NELSON

PROPOSED LOCATION:

SESW 04 080S 220E

SURFACE: 0600 FSL 2321 FWL

BOTTOM: 1500 FNL 1750 FEL *Sec 9*

COUNTY: Uintah

LATITUDE: 40.14632 LONGITUDE: -109.4461

UTM SURF EASTINGS: 632362 NORTHINGS: 4444944

FIELD NAME: WHITE RIVER (705)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0971

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat
☒ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. ESB000024)
☒ Potash (Y/N)
☒ Oil Shale 190-5 (B) or 190-3 or 190-13
☒ Water Permit
(No. 49-2153)
☒ RDCC Review (Y/N)
(Date:)
☒ Fee Surf Agreement (Y/N)
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

☒ R649-2-3. *Horizontal*
Unit: WHITE RIVER
☒ R649-3-2. General
Siting: 460' From Qtr/Qtr & 920' Between Wells
☒ R649-3-3. Exception
☒ Drilling Unit
Board Cause No: *138-1*
Eff Date: *8-13-1969*
Siting: *460' or 1500' or 920' or other wells.*
☒ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: *1- Federal Approval*

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

May 29, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development White River Unit,
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2008 as a horizontal completion within the White River Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-047-40097	WRU GB 14G-4-8-22 Sec 4 T08S R22E 0600 FSL 2321 FWL	BHL Sec 9 T08S R22E 1500 FNL 1750 FEL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - White River Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:5-29-08



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

May 29, 2008

Questar Exploration & Production Company
11002 E 17500 S
Vernal, UT 84078

Re: WRU GB 14G-4-8-22 Well, Surface Location 600' FSL, 2321' FWL, SE SW, Sec. 4,
T. 8 South, R. 22 East, Bottom Location 1500' FNL, 1750' FEL, SW NE, Sec. 9,
T. 8 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40097.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Vernal Office

Operator: Questar Exploration & Production Company
Well Name & Number WRU GB 14G-4-8-22
API Number: 43-047-40097
Lease: UTU-0971

Surface Location: SE SW Sec. 4 T. 8 South R. 22 East
Bottom Location: SW NE Sec. 9 T. 8 South R. 22 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

RECEIVED

Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 22 2008
SUBMIT IN TRIPLICATE

BLM

FORM APPROVED
OMB NO. 1040-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK

DRILL ☒

DEEPEN ☐

TYPE OF WELL

☒

☐

☐

☐

☒

OIL WELL

GAS WELL

OTHER

SINGLE
ZONE

MULTIPLE
ZONE

CONFIDENTIAL

2. NAME OF OPERATOR

QUESTAR EXPLORATION & PRODUCTION, CO.

Contact: Jan Nelson

E-Mail: jan.nelson@questar.com

3. ADDRESS

11002 E. 17500 SO. Vernal, Ut 84078

Telephone number

Phone 435-781-4031 Fax 435-781-4395

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*)

At Surface 600' FSL 2321' FWL, SESW, SECTION 4, T8S, R22E

At proposed production zone 1500' FNL 1750' FEL, SWNE, SECTION 9, T8S, R22E

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE*

34 +/- MILES SOUTH OF VERNAL, UTAH

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(also to nearest drig, unit line if any)

600' +/-

16. NO. OF ACRES IN LEASE

160.00

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED location to nearest well, drilling,
completed, applied for, on this lease, ft

19. PROPOSED DEPTH

8,097'

20. BLM/BIA Bond No. on file
ESB000024

21. ELEVATIONS (Show whether DF, RT, GR, ect.)

5167.9' GR

22. DATE WORK WILL START

ASAP

23. Estimated duration

40 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A surface Use Plan (if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

SIGNED

Name (printed/typed) Jan Nelson

DATE 05/22/2008

TITLE

Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify the applicant holds any legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

Assistant Field Manager
Lands & Mineral Resources

DATE 8-6-2008

*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

NOS 0324-2008

AFMSS# 08PP0705A

CONFIDENTIAL
RECEIVED

AUG 12 2008

DIV. OF OIL, GAS & MINING



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Questar Exp. & Prod., Inc. **Location:** SESW, Sec 4, T8S, R22E
Well No: WRU GB 14G-4-8-22 **Lease No:** UTU-02510A
API No: 43-047-40097 **Agreement:** White River Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

Fax: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Surface COAs:

- During operations, if any vertebrate paleontological resources are discovered, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Vernal BLM office shall be notified within 48 hrs of the discovery, and a decision as to the preferred alternative/course of action will be rendered.
- As in the APD the applicant has committed to not construct or drill from March 1st to August 15th due to red-tailed hawk and burrowing owl habitat.

DOWNHOLE CONDITIONS OF APPROVAL (COAs):

SITE SPECIFIC DOWNHOLE COAs:

- The 7" casing cement shall extend a minimum of 200 feet above the 9 5/8" surface casing shoe.
- Submit the MWD-GR survey from the directional/horizontal drilling operations, hard copy or electronically.
- Logging program: Run cement bond log in 7" from kick-off point to top of cement. Gamma Ray shall be run from kick-off point to surface.

Variances Granted:

Air Drilling:

- Properly lubricated and maintained rotating head, variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 50' to 70' from the well bore.
- Automatic igniter or continuous pilot light on the blooie line and dust suppression equipment. Variance granted for water injected into the compressed air to substitute for the pilot light and dust suppression equipment.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck mounted air compressor located within 50 feet from the well bore on the opposite side from the blooie line.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be

performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be

filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATIONName of Company: QUESTAR EXPL & PROD COMPANYWell Name: WRU GB 14G-4-8-22Api No: 43-047-40097 Lease Type: FEDERALSection 04 Township 08S Range 22E County UINTAHDrilling Contractor PETE MARTIN DRLG RIG # RATHOLE**SPUDDED:**Date 08/19/08Time 8:00 AMHow DRY**Drilling will Commence:** _____Reported by KERRY SALESTelephone # (435) 828-0339Date 08/20/08 Signed CHD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir
Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Gas
☒ Well ☐ Well ☐ Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION CO.

3. Address and Telephone No.

11002 EAST 17500 SOUTH - VERNAL, UT 84078

Contact: Dahn.Caldwell@questar.com
435-781-4342 Fax 435-781-4357

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SURFACE: 600' FSL, 2321' FWL, SESW, SEC 4-T8S-R22E
BOTTOM: 1500' FNL, 1750' FEL, SWNE, SEC 9-T8S-R22E**

Lease Designation and Serial No.

UTU-02510A

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA, Agreement Designation

WHITE RIVER UNIT

8. Well Name and No.

WRU GB 14G 4 8 22

9. API Well No.

43-047-40097

10. Field and Pool, or Exploratory Area

WHITE RIVER

11. County or Parish, State

UINTAH

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other **SPUD**
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

On 8/19/08 - Drilled 40' of 18" conductor hole. Set 40' of 14" conductor pipe. Cmted w/ Ready Mix.

On 8/20/08 - Drilled 12-1/4" hole and run 12 jts 9-5/8", J-55, 36# csg & set @ 499' GL. Cmted w/ 310 sxs cmt.

RECEIVED

AUG 25 2008

DIV. OF OIL, GAS & MINING

3 - BLM, 2- Utah OG&M, 1 - Denver, 1 - file Word file-server

14. I hereby certify that the foregoing is true and correct.

Signed **Dahn F. Caldwell**

Office Administrator II

Date

8/20/08

(This space for Federal or State office use)

Approved by:

Title

Date

Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

UTU-02510A

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.

WHITE RIVER UNIT

8. Well Name and No.

WRU GB 14G-4-8-22

9. API Well No.

43-047-40097

10. Field and Pool, or Exploratory Area

WHITE RIVER

11. County or Parish, State

UINTAH

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Questar Exploration & Production Co.

Contact: Jan Nelson

3a. Address

11002 East 17500 South Vernal, Utah 84078

3b. Phone No. (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

600' FSL 2321' FWL, SESW, SECTION 4, T8S, R22E SURFACE LOCATION
1500' FNL 1750' FEL, SWNE, SECTION 9, T8S, R22E BOTTOM HOLE LOCATION

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input checked="" type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Questar Exploration & Production Company requests a change in the bottom hole location in order to drill a longer lateral to increase the drainage area of the horizontal wellbore. In addition, the wellbore casing design will change to leave the horizontal portion of the lateral open hole. Production casing will still be set through the build section and into the reservoir zone as originally planned.

Approved by the
Utah Division of
Oil, Gas and Mining

Please see Attached:

- 1) Revised procedure
- 2) Revised 8-point plan
- 3) Revised Drilling Plan
- 4) Revised Plats

COPY SENT TO OPERATOR

Date: 8-27-2008

Initials: KS

2400' FNL
2050' FEL

632709X
4444028Y
40.138008
-109.442227

Date: 08-26-08

By: [Signature] RECEIVED

AUG 25 2008

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Laura Bills

Signature

[Signature]

Title

Associate Regulatory Affairs Analyst

Date

August 22, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONFIDENTIAL

QUESTAR EXPLORATION AND PRODUCTION

WRU GB 14G-4-8-22 New Horizontal Well Summarized Procedure

1. MIRU air rig.
2. Drill 12 1/4" surface hole to 499'±.
3. Run 9 5/8", 36#, J-55, STC casing and cement to surface.
4. RD air rig, move off location.
5. MIRU drilling rig.
6. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
7. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
8. Drill 8 3/4" hole to 5,000'.
9. TOO H, PU directional BHA, TIH.
10. Drill to 5,286', kick off and drill well at a 158° azimuth with 14°/100' build rates to land in G1 Lime formation at a TVD of +/- 5,695', 5,938' MD.
11. Drill in zone to 5,938' MD. TOO H, LDDP.
12. PU and run 7", 26#, N-80 or HCP-110, LTC casing to 5,938', cement casing.
13. PU 3 1/2" DP, directional BHA, TIH.
14. Drill +/- 2,831' of lateral in G1 Lime.
 - a. Mud system to be a NaCl weighted water based mud, weights are expected to be in the 8.8 – 9.2 ppg range.
15. Circulate and condition hole, TOO H, LDDP.
16. RU wireline, RIH and set RBP @ +/- 4,500' to isolate lateral.
17. ND BOP's.
18. RDMO.

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. **Formation Tops**

The estimated top of important geologic markers are as follows:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	2,980'	3,450'
Kick Off Point	5,286'	5,286'
Green River (G1 Lime)	5,695'	5,938'
TD	5,627'	8,769'

2. **Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	Green River (G1 Lime)	5,695' – 5,627'	5,938' – 8,769'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right A36125 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. Operator's Specification for Pressure Control Equipment

- A. 3,000 psi double gate, 3,000 psi annular (schematic attached)
- B. Function test daily.
- C. All casing strings shall be pressure tested (0.22 psi/ft or 1,500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield of the casing.
- D. Ram type preventers and associated equipment shall be tested to rated working pressure if isolated by a test plug or to 50% of the internal yield pressure of casing, whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 3M system and individual components shall be operable as designed.

4. Casing Program

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, Lb/ft	Grade	Thread	Condition
17 1/2"	14"	sfc	40'	Steel	Cond	None	Used
12 1/4"	9 5/8"	sfc	499'	36.0	J-55	STC	New
8 3/4"	7"	sfc	5,938'	26.0	N-80 or HCP-110	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	N-80	LTC	5,410 psi	7,240 psi	519,000 lb.
7"	26.0 lb.	HCP-110	LTC	7,800 psi	9,950 psi	693,000 lb.

The 7" casing will be N-80 or HCP-110 depending on what's available.

The lateral portion of this wellbore will be left open hole.

Please refer to the attached wellbore diagram and re-entry procedure for further details.

5. Auxilliary Equipment

- A. Kelly Cock – Yes
- B. Float at the bit – No

ONSHORE OIL & GAS ORDER NO. 1
QUESTAR EXPLORATION & PRODUCTION CO.
WRU GB 14G-4-8-22

- C. Monitoring equipment on the mud system – visually and/or PVT or Flow Show
- D. Fully opening safety valve on the rig floor – Yes
- E. Rotating Head – Yes

If drilling with air the following will be used:

- F. The blooie line shall be at least 6” in diameter and extend at least 100’ from the wellbore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’)
- H. Compressor shall be tied directly to the blooie line through a manifold
- I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Drilling of the lateral will be done with fresh water KCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and KCl. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used the concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow show will be used upon exit of existing production casing to TD.

Gas detector will be used upon exit of existing production casing to TD.

6. Testing, Logging, and Coring Program

- A. Cores – None Anticipated
- B. DST – None Anticipated
- C. Logging:
 - i. Mud logging from casing exit to TD
 - ii. MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the lateral within the desired zone.
- D. Formation and completion interval: H4a Lime interval, final determination of completion will be made by analysis of mud logging data. Stimulation: stimulation will be designed for the particular area of interest encountered.

7. **Cementing Program**

20" Conductor:

Cement to surface with construction cement.

9-5/8" Surface Casing: sfc – 499' (MD)

Lead/Tail Slurry: 0' – 499'. 170 sks (310 cu ft) Rockies LT cement + 0.25 lb/sk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft³/sk, Slurry volume: 12-1/4" hole + 100% excess.

7" Intermediate Casing: sfc - 5,938' (MD)

Lead/Tail Slurry: 0' – 5,938'. 900 sks (1100 cu ft) 50/50 Poz Premium + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.125 lb/sk Poly-E-Flake. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft³/sk, Slurry volume: 8-3/4" hole + 25% excess.

8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered or is known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom-hole pressure equals approximately 2,800 psi. Maximum anticipated bottom hole temperature is approximately 120°F.

WRU 14G-4-8-22

Updated 8-21-08 CJL

API # 43-047-

Proposed WBD

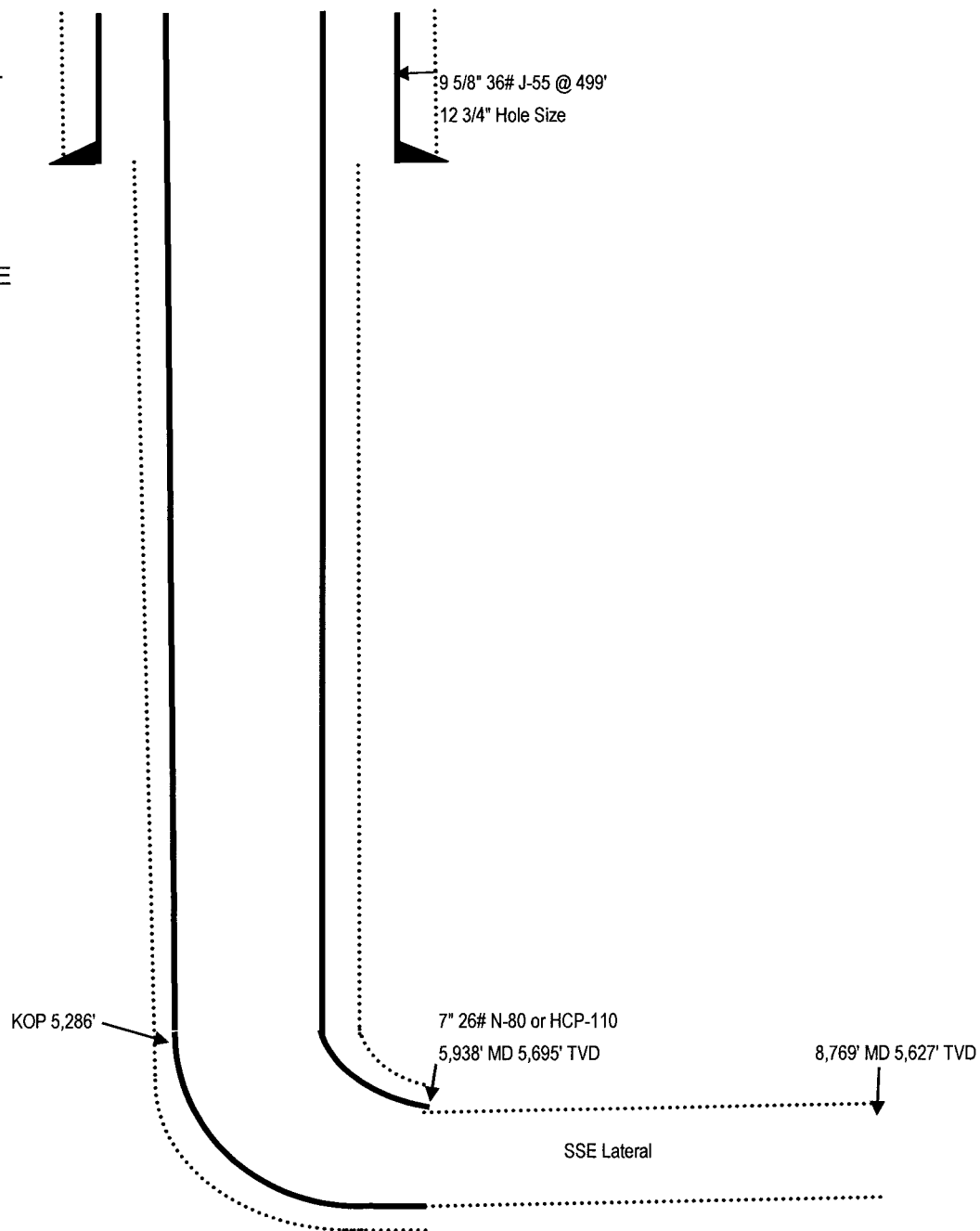
Uinta Basin

Sec 4-T8S-R22E, UINTAH CO, UT

KB 5,187'

GL 5,171'

NOTE: NOT TO SCALE



Questar Exploration & Production

Uintah County, UT NAD27

WRU GB

WRU GB 14G-4-8-22

OH

Plan: Plan #1

Standard Planning Report

21 August, 2008

Scientific Drilling

Planning Report

Database: EDM 2003.16 Multi-User Db
Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well WRU GB 14G-4-8-22
TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project Uintah County, UT NAD27

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Utah Central 4302

System Datum: Mean Sea Level

Site WRU GB,

Site Position: **Northing:** 666,889.69 ft **Latitude:** 40° 8' 45.440 N
From: Lat/Long **Easting:** 2,577,882.01 ft **Longitude:** 109° 25' 57.500 W
Position Uncertainty: 0.00 ft **Slot Radius:** in **Grid Convergence:** 1.32 °

Well WRU GB 14G-4-8-22, 600' FSL 2321' FWL Sec 4 T8S R22E

Well Position **+N/-S** -0.01 ft **Northing:** 666,845.53 ft **Latitude:** 40° 8' 45.900 N
+E/-W 0.00 ft **Easting:** 2,573,945.00 ft **Longitude:** 109° 26' 48.200 W
Position Uncertainty 0.00 ft **Wellhead Elevation:** ft **Ground Level:** 5,171.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2008/08/21	11.42	66.08	52,719

Design Plan #1

Audit Notes:

Version: **Phase:** PLAN **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	-3.00	-0.01	0.00	157.36

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	
5,286.00	0.00	0.00	5,286.00	-0.01	0.00	0.00	0.00	0.00	0.00	
5,938.42	91.37	157.36	5,695.00	-386.63	161.25	14.00	14.00	0.00	157.36	
8,768.63	91.38	157.36	5,627.00	-2,998.01	1,250.35	0.00	0.00	0.00	7.70	WRU B 14G-4-8-22 P

Scientific Drilling Planning Report

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North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	-0.01	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	-0.01	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	-0.01	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	-0.01	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	-0.01	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	-0.01	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	-0.01	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	-0.01	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	-0.01	0.00	0.00	0.00	0.00	0.00
2,982.00	0.00	0.00	2,982.00	-0.01	0.00	0.00	0.00	0.00	0.00
Uinta									
3,000.00	0.00	0.00	3,000.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	-0.01	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	-0.01	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	-0.01	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	-0.01	0.00	0.00	0.00	0.00	0.00

Scientific Drilling Planning Report

Database: EDM 2003.16 Multi-User Db
Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: Plan #1

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MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.00	0.00	0.00	5,100.00	-0.01	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	-0.01	0.00	0.00	0.00	0.00	0.00
5,286.00	0.00	0.00	5,286.00	-0.01	0.00	0.00	0.00	0.00	0.00
5,300.00	1.96	157.36	5,300.00	-0.23	0.09	0.24	14.00	14.00	0.00
5,400.00	15.97	157.36	5,398.53	-14.58	6.07	15.78	14.00	14.00	0.00
5,500.00	29.97	157.36	5,490.37	-50.50	21.06	54.70	14.00	14.00	0.00
5,600.00	43.97	157.36	5,570.07	-105.87	44.15	114.70	14.00	14.00	0.00
5,700.00	57.98	157.36	5,632.87	-177.40	73.98	192.19	14.00	14.00	0.00
5,800.00	71.98	157.36	5,675.06	-260.82	108.78	282.59	14.00	14.00	0.00
5,900.00	85.99	157.36	5,694.11	-351.19	146.47	380.50	14.00	14.00	0.00
5,909.79	87.36	157.36	5,694.68	-360.22	150.23	390.28	14.00	14.00	0.00
G1 Lime Top Porosity									
5,938.00	91.31	157.36	5,695.01	-386.24	161.09	418.48	14.00	14.00	0.00
Intermediate Casing									
5,938.42	91.37	157.36	5,695.00	-386.63	161.25	418.90	14.00	14.00	0.00
6,000.00	91.37	157.36	5,693.53	-443.45	184.95	480.46	0.00	0.00	0.00
6,100.00	91.37	157.36	5,691.14	-535.72	223.43	580.43	0.00	0.00	0.00
6,200.00	91.37	157.36	5,688.74	-627.98	261.91	680.40	0.00	0.00	0.00
6,300.00	91.37	157.36	5,686.35	-720.25	300.40	780.37	0.00	0.00	0.00
6,400.00	91.37	157.36	5,683.96	-812.52	338.88	880.34	0.00	0.00	0.00
6,500.00	91.37	157.36	5,681.56	-904.79	377.36	980.32	0.00	0.00	0.00
6,600.00	91.37	157.36	5,679.16	-997.06	415.84	1,080.29	0.00	0.00	0.00
6,700.00	91.37	157.36	5,676.77	-1,089.32	454.33	1,180.26	0.00	0.00	0.00
6,800.00	91.37	157.36	5,674.37	-1,181.59	492.81	1,280.23	0.00	0.00	0.00
6,900.00	91.37	157.36	5,671.97	-1,273.86	531.29	1,380.20	0.00	0.00	0.00
7,000.00	91.38	157.36	5,669.57	-1,366.13	569.77	1,480.17	0.00	0.00	0.00
7,100.00	91.38	157.36	5,667.17	-1,458.40	608.25	1,580.14	0.00	0.00	0.00
7,200.00	91.38	157.36	5,664.77	-1,550.66	646.73	1,680.11	0.00	0.00	0.00
7,300.00	91.38	157.36	5,662.37	-1,642.93	685.22	1,780.09	0.00	0.00	0.00
7,400.00	91.38	157.36	5,659.97	-1,735.20	723.70	1,880.06	0.00	0.00	0.00
7,500.00	91.38	157.36	5,657.56	-1,827.47	762.18	1,980.03	0.00	0.00	0.00
7,600.00	91.38	157.36	5,655.16	-1,919.74	800.66	2,080.00	0.00	0.00	0.00
7,700.00	91.38	157.36	5,652.75	-2,012.00	839.14	2,179.97	0.00	0.00	0.00
7,800.00	91.38	157.36	5,650.35	-2,104.27	877.62	2,279.94	0.00	0.00	0.00
7,900.00	91.38	157.36	5,647.94	-2,196.54	916.10	2,379.91	0.00	0.00	0.00
8,000.00	91.38	157.36	5,645.53	-2,288.81	954.58	2,479.88	0.00	0.00	0.00
8,100.00	91.38	157.36	5,643.12	-2,381.08	993.06	2,579.85	0.00	0.00	0.00
8,200.00	91.38	157.36	5,640.72	-2,473.35	1,031.54	2,679.83	0.00	0.00	0.00
8,300.00	91.38	157.36	5,638.31	-2,565.61	1,070.03	2,779.80	0.00	0.00	0.00
8,400.00	91.38	157.36	5,635.89	-2,657.88	1,108.51	2,879.77	0.00	0.00	0.00
8,500.00	91.38	157.36	5,633.48	-2,750.15	1,146.99	2,979.74	0.00	0.00	0.00
8,600.00	91.38	157.36	5,631.07	-2,842.42	1,185.47	3,079.71	0.00	0.00	0.00
8,700.00	91.38	157.36	5,628.66	-2,934.69	1,223.95	3,179.68	0.00	0.00	0.00
8,768.63	91.38	157.36	5,627.00	-2,998.01	1,250.35	3,248.29	0.00	0.00	0.00

Scientific Drilling

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TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
WRU B 14G-4-8-22 PBI - plan hits target center - Point	0.00	0.00	5,627.00	-2,998.01	1,250.35	663,877.02	2,575,263.84	40° 8' 16.270 N	109° 26' 32.100 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
5,938.00	5,695.01	Intermediate Casing	7.000	8.750

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,982.00	2,982.00	Uinta		0.00	0.00
5,909.79	5,704.00	G1 Lime Top Porosity		1.40	325.00
	5,708.00	G1 Lime Bottom Porosity		1.40	325.00



Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: Plan #1

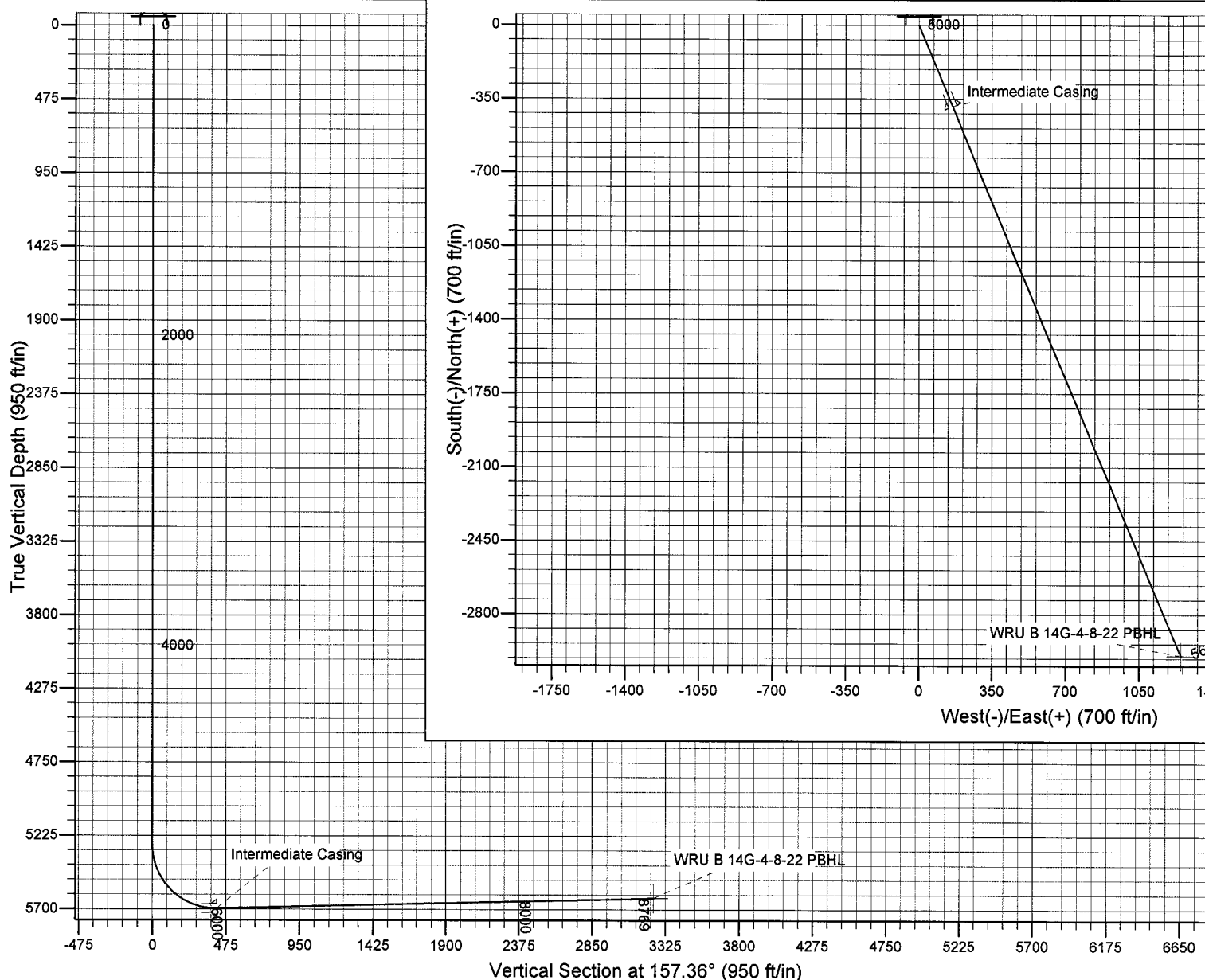
Questar Exploration & Production

WELL DETAILS: WRU GB 14G-4-8-22

+N/-S	+E/-W	GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)	5171.00	
		Northing	Easting	Latitude
-0.01	0.00	666845.53	2573945.00	40° 8' 45.900 N
				109° 26' 48.200 W

T
M
Azimuths to True North
Magnetic North: 11.42°

Magnetic Field
Strength: 52718.6snT
Dip Angle: 66.08°
Date: 2008/08/21
Model: IGRF2005-10



Plan: Plan #1 (WRU GB 14G-4-8-22/OH)

Created By: Julie Cruse Date: 2008-08-21

PROJECT DETAILS: Uintah County, UT NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302
System Datum: Mean Sea Level
Local North: True North

T8S, R22E, S.L.B.&M.

WEST - 2640.00' (G.L.O.) **T7S**

1938 Brass Cap
1.6' High

T8S

(677.16')

CC 1938 Brass Cap 0.6' High, Mound of Stones

S89°59'48"E 339.55' (Meas.)

SE COR. SEC. 32
2" Bent Pipe Buried 1.0' Deep, Cap Missing

N89°57'02"E - 2642.89' (Meas.)

LOT 4

LOT 3

LOT 2

LOT 1

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

E 1/4 COR. SEC. 5
1938 Brass Cap
0.7' High

S00°01'15"E 175.72' (Meas.)

1938 Brass Cap
0.8' High

LOT 10

NOTE:
THE PROPOSED BOTTOM HOLE FOR THIS WELL
IS LOCATED IN THE SW 1/4 NE 1/4 OF SECTION
9, T8S, R22E, S.L.B.&M. AT A DISTANCE OF
2400' FNL 2050' FEL. IT BEARS S22°39'34"E
3250.11' FROM THE PROPOSED WELL HEAD.

LOT 11

2321'

WRU GB #14G-4-8-22
Elev. Ungraded Ground = 5171'

SE COR. SEC. 5
Brass Cap

1938 Brass Cap
0.7' High, Scattered
Stones

S89°57'33"W - 2974.55' (Meas.)

S89°58'19"W - 2640.16' (Meas.)

C.C.
Brass Cap

N01°55'07"W 176.13' (Meas.)

LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)

LATITUDE = 40°08'45.77" (40.146047)
LONGITUDE = 109°26'50.67" (109.447408)

NAD 27 (SURFACE LOCATION)

LATITUDE = 40°08'45.90" (40.146083)
LONGITUDE = 109°26'48.20" (109.446722)

QUESTAR EXPLR. & PROD.

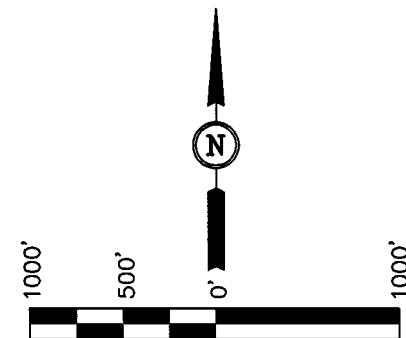
Well location, WRU GB #14G-4-8-22 (SURFACE LOCATION), located as shown in the SE 1/4 SW 1/4 of Section 4, T8S, R22E, S.L.B.&M, Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE
CERTIFICATE

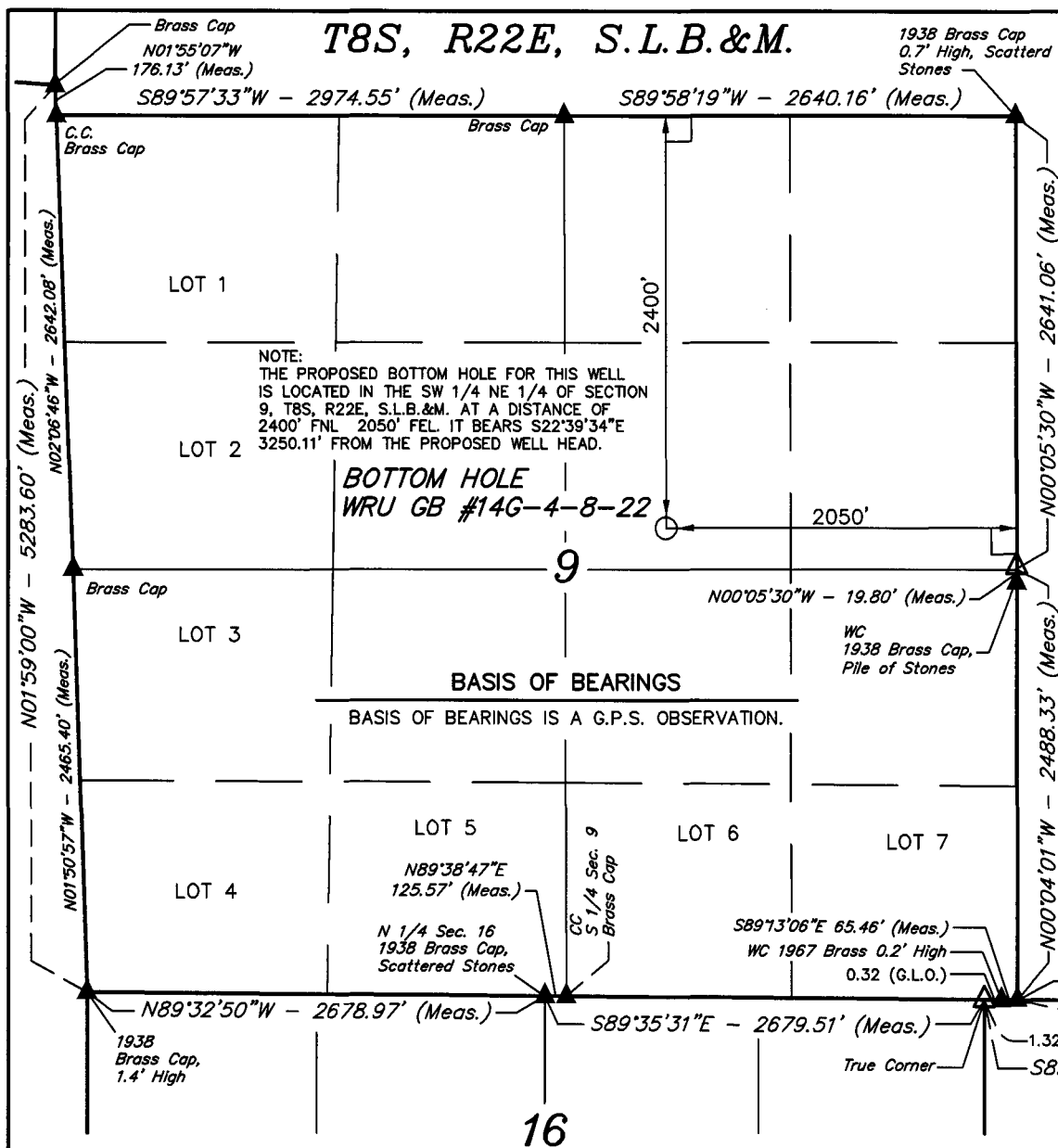
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT L. KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 08-14-08
REVISED: 06-11-08
REVISED: 03-20-08

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 10-10-07	DATE DRAWN: 10-16-07
PARTY D.A. T.M. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXPLR. & PROD.	



LEGEND:

- └ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS COMPUTED FROM G.L.O. (Not Set on Ground)

REVISED: 08-14-08

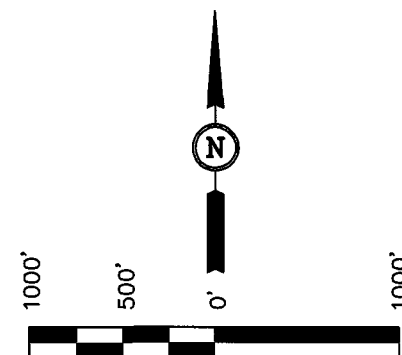
NAD 83 (TARGET BOTTOM HOLE)	
LATITUDE = 40°08'16.14"	(40.137817)
LONGITUDE = 109°26'34.57"	(109.442936)
NAD 27 (TARGET BOTTOM HOLE)	
LATITUDE = 40°08'16.27"	(40.137853)
LONGITUDE = 109°26'32.10"	(109.442250)

QUESTAR EXPLR. & PROD.

Well location, WRU GB #14G-4-8-22 (BOTTOM HOLE), located as shown in the SW 1/4 NE 1/4 of Section 9, T8S, R22E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.



SCALE CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE MAP WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT H. KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 10-10-07	DATE DRAWN: 06-11-08
PARTY D.A. T.M. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXPLR. & PROD.	

ENTITY ACTION FORM - FORM 6

OPERATOR ACCT. No. N-5085
OPERATOR: **Questar Exploration & Production Co.**
ADDRESS: **11002 East 17500 South**
Vernal, Utah 84078 (435)781-4342

Action Code	Current Entity No.	New Entity No.	API Number	Well Name	QQ	SC	TP	RG	County	Spud Date	Effective Date
B	99999	4915	43-047-40097	WRU GB 14G 4 8 22	SESW	4	8S	22	Uintah	8/19/08	8/25/08

WELL 1 COMMENTS: BOTTOM LOCATION - 1500' FNL, 1750' FEL, SWNE, SEC 9-T8S-R22E

GREEN

CONFIDENTIAL

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:

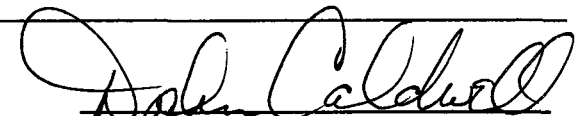
WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)


Signature

Office Administrator II 8/20/08
Title Date

Phone No. (435)781-4342

CONFIDENTIAL

RECEIVED

AUG 25 2008

DIV. OF OIL, GAS & MINING

Questar E & P

Page 1 of 8

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: DRILLING
 Contractor Name: Ensign Drilling USD
 Rig Name: ENSIGN

Start: 8/20/2008
 Rig Release:
 Rig Number: 57
 Spud Date: 8/19/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/21/2008	06:00 - 11:30	5.50	LOC	2	DRLCON	DRILL 40' OF 18" HOLE AND SET 14" CONDUCTOR PIPE. CEMENT WITH READY MIX.
	11:30 - 20:00	8.50	DRL	9	DRLSUR	HAMMER DRILL 12 1/4" HOLE FROM 40' TO 520'. BLOW DOWN WELL
	20:00 - 21:00	1.00	TRP	3	DRLSUR	LAY DOWN DRILL STRING.
	21:00 - 22:00	1.00	CSG	2	CSGSUR	SAFETY MEETING. RUN 12 JOINTS OF 9 5/8", J55, 36#, LT&C PIPE AS FOLLOWS: SHOE AT 499', FLOAT COLLAR AT 454.94'. RAN 3 CENTRALIZERS FROM 489' TO 373' AND ONE AT 84'. NOTE: ALL MEASUREMENTS ARE FROM GROUND LEVEL
	22:00 - 00:00	2.00	CMT	2	CSGSUR	SAFETY MEETING. RIG UP AND CEMENT AS FOLLOWS: PUMP 40 BBL OF WATER, 10 BBL OF GEL SPACER. LEAD SLURRY 15.8 PPG, YEALD 1.15, GAL/SK 5, 63.4 BBL, 310 SKS. DISPLACE WITH 35.3 BBL, PLUG BUMPED, FLOATS HELD, 18 BBL OF CEMENT TO SURFACE.
	00:00 - 06:00	6.00	WOT	1	CSGSUR	WAIT ON CEMENT
8/31/2008	06:00 - 07:00	1.00	LOC	4	RDMO	CONTACT BLM MICHAEL LEE ON 8-18-08 AT 15:20 HRS FOR SPUD CONDUCTOR ON 8-19-08 AT 08:00 HRS.
	07:00 - 18:00	11.00	LOC	3	RDMO	CONTACT UTAH STATE CAROL DANIELS ON 8-18-08 AT 15:25 HRS FOR SPUD ON 8-19-08 AT 08:00.
	18:00 - 06:00	12.00	LOC	4	RDMO	CONTACT WONSIT VALLY DAHN CALDWELL AND RED WASH JAN NEILSON WITH SPUD INFORMATION. CALLED BLM JAMIE SPARGER ON 8-20-08 AT 07:40 HRS FOR RUNNING CASING AND CEMENTING ON 8-20-08 AT 22:00 HRS.
9/1/2008	06:00 - 21:00	15.00	LOC	4	MIRU	PRE-PAIR RIG FOR TRUCKS MOVE RIG F/ GB 4W 9-8-22 TO THE WRU GB 14G-4-8-22 RIG UP & PRE-PAIR DERRICK TO BE RAISES THIS AM & MOVE LIVING QUARTERS TO NEW LOCATION 90% RIGGED UP
	21:00 - 02:00	5.00	BOP	1	MIRU	RAISE DERRICK / MOVE LIVING QUARETERS TO NEW LOCATION / RIG UP FLOOR EQUIPMENT & FINISH RIGGING UP BACK YARD / NOTIFIED JAKE BIRCHELL W/ THE UTAH BLM @ 1500 PM ON 8/31/2008 ON BOP TEST (VOICE MAIL)
	02:00 - 06:00	4.00	BOP	2	MIRU	NIPPLE UP BOP'S & CHANGE PIPE RAMS F/ 2 7/8" TO 4 1/2" TEST BOP'S W/ B&C QUICK TEST / LOWER KELLY VALVE, UPPER & LOWER PIPE RAMS, HCR / LEAK ON BOTTOM FLANGE / TIGHTEN BOLTS ON FLANGE
9/2/2008	06:00 - 09:30	3.50	BOP	2	DRLIN1	FINISH TESTING BOP'S W/ B&C QUICK TEST 3000 PSI HIGH 10 MIN, 250 PSI LOW FOR 5 MIN/TEST ANNULAR 1500 PSI 10MIN, 250 PSI LOW 5 MIN / TEST 9 5/8 CASING TO 1500 PSI FOR 30 MIN.
	09:30 - 10:30	1.00	BOP	1	DRLIN1	WAIT ON 9" WEAR RING
	10:30 - 11:30	1.00	BOP	1	DRLIN1	INSTALL WEAR RING
	11:30 - 15:00	3.50	TRP	1	DRLIN1	PICK UP BHA TO DRILL 8 3/4" VERTICAL SECTION
	15:00 - 17:00	2.00	DRL	4	DRLIN1	TAG CEMENT @ 435' & DRILL SHOE TRACK TO 499' (FLOAT COLLAR @ 454' & SHOE @ 499') 21' CEMENT & RAT HOLE TO 520'
	17:00 - 17:30	0.50	DRL	1	DRLIN1	DRILLING F/ 520' TO 530' (10' OF NEW FORMATION FOR F.I.T)
	17:30 - 18:00	0.50	CIRC	1	DRLIN1	CIRCULATE SWEEP AROUND
	18:00 - 18:30	0.50	EQT	2	DRLIN1	FIT @ 530' W/ 8.4 PPG, 60 PSI SURFACE PRESSURE=10.6 PPG. EQUIVILANT
	18:30 - 22:00	3.50	DRL	1	DRLIN1	DRILLING F/ 530' TO 1006'
	22:00 - 22:30	0.50	SUR	1	DRLIN1	RUN WIRELINE SURVEY @ 972' W/ 1.9 INC. 142.0 AZI.
	22:30 - 00:00	1.50	DRL	1	DRLIN1	DRILLING F/ 1006' TO 1160'
	00:00 - 00:30	0.50	RIG	4	DRLIN1	INSTALL ROTATING HEAD / DRIVE BUSHING
	00:30 - 05:30	5.00	DRL	1	DRLIN1	DRILLING F/ 1160' TO 1877'

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22

Common Well Name: WRU GB 14G-4-8-22

Event Name: DRILLING

Contractor Name: Ensign Drilling USD

Rig Name: ENSIGN

Start: 8/20/2008

Rig Release:

Rig Number: 57

Spud Date: 8/19/2008

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/2/2008	05:30 - 06:00	0.50	SUR	1	DRLIN1	SURVEY @ 1842'
9/3/2008	06:00 - 15:00	9.00	DRL	1	DRLIN1	DRILLING F/ 1877' TO 2529'
	15:00 - 15:30	0.50	RIG	1	DRLIN1	LUBRICATE RIG / FUNCTION HYDRIL, COM/GREASE SWIVEL, CROWN
	15:30 - 16:00	0.50	SUR	1	DRLIN1	RUN WIRELINE DEVIATION SURVEY 2495' 2 INC. 188.7 AZI.
	16:00 - 19:30	3.50	DRL	1	DRLIN1	DRILLING F/ 2529' TO 2763'
	19:30 - 22:00	2.50	RIG	2	DRLIN1	WORK ON PUMPS
	22:00 - 02:30	4.50	DRL	1	DRLIN1	DRILLING F/ 2763' TO 2995'
	02:30 - 03:00	0.50	SUR	1	DRLIN1	RUN WIRELINE DEVIATION SURVEY 2955' 2.5 INC. 193.4 AZI.
	03:00 - 06:00	3.00	DRL	1	DRLIN1	DRILLING F/ 2995' TO 3151'
9/4/2008	06:00 - 08:00	2.00	DRL	1	DRLIN1	DRILLING F/ 3151' TO 3182' (TIGHT HOLE @ 3151')
	08:00 - 11:00	3.00	FISH	6	DRLIN1	WORK TIGHT HOLE (TIGHT F/ 3139' TO 3161')
	11:00 - 13:00	2.00	CIRC	2	DRLIN1	CIRCULATE HOLE CLEAN / MUD UP W/ 36 VIS & 8.4 PPG / PUMP & SPOT 50 BBL. LCM PILL ON BOTTOM
	13:00 - 17:00	4.00	TRP	2	DRLIN1	TRIP OUT OF HOLE CHANGE BIT & CHECK BHA
	17:00 - 20:00	3.00	TRP	2	DRLIN1	TRIP IN HOLE & PICK UP DRILLING JARS
	20:00 - 21:30	1.50	REAM	1	DRLIN1	REAM F/ 3122' TO 3182'
	21:30 - 06:00	8.50	DRL	1	DRLIN1	DRILLING F/ 3182' TO 3402' (LOSSING 884 BBLs. FOR THE LAST 24 HRS.)
9/5/2008	06:00 - 07:30	1.50	DRL	1	DRLIN1	DRILLING F/ 3402' TO 3464'
	07:30 - 08:00	0.50	SUR	1	DRLIN1	WIRELINE DEVIATION SURVEY DEPTH 3429' INC. 3.3 CORR. AZI 206.43
	08:00 - 13:00	5.00	DRL	1	DRLIN1	DRILLING F/ 3464' TO 3619'
	13:00 - 13:30	0.50	RIG	1	DRLIN1	RIG SERVICE / FUNCTION UPPER PIPE RAMS
	13:30 - 03:00	13.50	DRL	1	DRLIN1	DRILLING F/ 3619' TO 3961'
	03:00 - 03:30	0.50	SUR	1	DRLIN1	WIRELINE DEVIATION SURVEY DEPTH 3960' INC. 1.1 CORR. AZI. 212.93
9/6/2008	03:30 - 06:00	2.50	DRL	1	DRLIN1	DRILLING F/ 3961' TO 4003'
	06:00 - 12:00	6.00	DRL	1	DRLIN1	DRILLING F/ 4003' TO 4210' ROP @ 34'/HR.
	12:00 - 12:30	0.50	RIG	1	DRLIN1	RIG SERVICE / LUBRICATE RIG FUNCTION HYDRIL
	12:30 - 21:30	9.00	DRL	1	DRLIN1	DRILLING F/ 4210' TO 4521' ROP @ 34'/HR
	21:30 - 22:00	0.50	SUR	1	DRLIN1	WIRELINE DEVIATION SURVEY DEPTH 4521' INC. 1.2 CORR. AZI. 211.13
9/7/2008	22:00 - 06:00	8.00	DRL	1	DRLIN1	DRILLING F/ 4521' TO 4744' ROP @ 27'/HR.
	06:00 - 12:00	6.00	DRL	1	DRLIN1	DRILING F/ 4744' TO 4958' ROP @ 35'/HR.
	12:00 - 12:30	0.50	RIG	1	DRLIN1	RIG SERVICE / FUCTION UPPER PIPE RAMS
	12:30 - 15:30	3.00	DRL	1	DRLIN1	DRILLING F/ 4956' TO 5049' ROP @ 31'/HR.
	15:30 - 16:00	0.50	SUR	1	DRLIN1	WIRELINE DEVIATION SURVEY (MISS RUN)
	16:00 - 17:30	1.50	DRL	1	DRLIN1	DRILLING F/ 5049' TO 5080' ROP @ 21'/HR.
	17:30 - 18:00	0.50	SUR	1	DRLIN1	WIRELINE DEVIATION SURVEY DEPTH 5045 INC. 1 CORR. AZI. 202.83
	18:00 - 03:00	9.00	DRL	1	DRLIN1	DRILLING F/ 5080' TO 5267' ROP @ 21'/HR.
	03:00 - 05:30	2.50	CIRC	1	DRLIN1	CIRCULATE 2 HIGH VIS SWEEPS / PUMP & SPOT LCM PILL @ 3200'
9/8/2008	05:30 - 06:00	0.50	SUR	1	DRLIN1	DROP SURVEY / SET KELLY BACK
	06:00 - 12:30	6.50	TRP	2	DRLIN1	TRIP OUT OF HOLE F/ 5267' TO BHA (TIGHT HOLE @ 3150') LAY DOWN VERTICAL HOLE BHA
	12:30 - 16:00	3.50	DRL	3	DRLIN1	PICK UP DIRECTIONAL BHA #1 / SCRIBE MWD, SURFACE TEST MUD MOTOR, MAKE UP BIT #3
	16:00 - 16:30	0.50	RIG	1	DRLIN1	RIG SERVICE / FUNCTION PIPERAMS
	16:30 - 18:00	1.50	TRP	2	DRLIN1	TRIP IN HOLE W/ HWDP
	18:00 - 19:00	1.00	REAM	1	DRLIN1	WASH & REAM TIGHT SPOT 913' TO 955'
	19:00 - 19:30	0.50	RIG	4	DRLIN1	INSTALL ROTATING HEAD RUBBER

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: DRILLING
 Contractor Name: Ensign Drilling USD
 Rig Name: ENSIGN

Start: 8/20/2008
 Rig Release:
 Rig Number: 57
 Spud Date: 8/19/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/8/2008	19:30 - 22:00	2.50	TRP	2	DRLIN1	TRIP IN HOLE TO 5207'
	22:00 - 00:00	2.00	REAM	1	DRLIN1	WASH & REAM F/ 5207' TO 5267'
	00:00 - 06:00	6.00	DRL	2	DRLIN1	SLIDE F/ 5267' TO 5315'
9/9/2008	06:00 - 13:30	7.50	DRL	2	DRLIN1	SLIDE F/ 5315' TO 5390'
	13:30 - 14:00	0.50	RIG	1	DRLIN1	RIG SERVICE / FUNCTION HYDRIL
	14:00 - 20:30	6.50	DRL	2	DRLIN1	SLIDE F/ 5390' TO 5452'
	20:30 - 22:00	1.50	CIRC	1	DRLIN1	CIRCULATE & CONDITION HOLE / MIX, PUMP & SPOT LCM PILL @ 3200'
9/10/2008	22:00 - 03:30	5.50	TRP	2	DRLIN1	TRIP OUT OF HOLE F/ 5452' TO BIT # 3
	03:30 - 06:00	2.50	DRL	3	DRLIN1	ORIENT DIRECTIONAL TOOLS
	06:00 - 07:00	1.00	TRP	1	DRLIN1	MAKE UP & ORIENT DIRECTIONAL TOOLS & SURFACE TEST MUD MOTOR
	07:00 - 08:00	1.00	RIG	1	DRLIN1	RIG SERVICE / WORK ON CROWN-O-MATIC
9/11/2008	08:00 - 18:30	10.50	TRP	2	DRLIN1	TRIP IN HOLE & REAM TO 5452' (TIGHT HOLE @ 3000' TO 3270', 4326' TO 4610', 5000' TO 5100', 5320' TO 5452'
	18:30 - 23:30	5.00	DRL	2	DRLIN1	SLIDE F/ 5452' TO 5496' ROP OF 9'/HR.
	23:30 - 01:30	2.00	DRL	1	DRLIN1	ROTATING F/ 5496' TO 5526' ROP OF 15'/HR.
	01:30 - 06:00	4.50	DRL	2	DRLIN1	SLIDE F/ 5526' TO 5545' 4'/HR.
	06:00 - 15:00	9.00	DRL	2	DRLIN1	SLIDE F/ 5545' TO 5607' = ROP 6.8 FPH
	15:00 - 15:30	0.50	RIG	1	DRLIN1	RIG SERVICE, GREASE CROWN BLOCKS, SWIVEL, FUNCTION HYDRILL
	15:30 - 18:30	3.00	DRL	2	DRLIN1	SLIDE F/ 5607' TO 5638' = ROP 10.3 FPH
9/12/2008	18:30 - 19:00	0.50	DRL	2	DRLIN1	ROTATE F/ 5638' TO 5642' = 8 FPH
	19:00 - 06:00	11.00	DRL	2	DRLIN1	SLIDE F/ 5642' TO 5700' = 5.2 FPH
	06:00 - 14:00	8.00	DRL	2	DRLIN1	DIRECTIONAL DRLG F/ 5700' TO 5762', ROP 7.75' FPH
	14:00 - 14:30	0.50	RIG	1	DRLIN1	RIG SERVICE, GREASE CROWN BLOCKS, SWIVEL, FUNCTION TEST HYDRILL
9/13/2008	14:30 - 23:30	9.00	DRL	2	DRLIN1	DIRECTIONAL DRLG F/ 5762' TO 5823', ROP 6.7 FPH
	23:30 - 01:00	1.50	CIRC	1	DRLIN1	PUMP SWEEP CIRC. BTMS UP, PUMP PILL
	01:00 - 06:00	5.00	TRP	10	DRLIN1	TRIP OUT OF HOLE FOR BIT
	06:00 - 07:00	1.00	TRP	1	DRLIN1	L/D MOTOR, MWD, & BIT
	07:00 - 09:30	2.50	TRP	1	DRLIN1	P/U MOTOR, ADJUST MOTOR, P/U MWD, TEST MOTOR, INSTALL BIT #5
	09:30 - 11:00	1.50	TRP	2	DRLIN1	TRIP IN HOLE TO 1776'
	11:00 - 11:30	0.50	REAM	1	DRLIN1	REAM F/ 1776' TO 1807' (CIRC SOME GRAVEL UP)
9/14/2008	11:30 - 13:00	1.50	TRP	2	DRLIN1	TRIP IN HOLE TO 5141'
	13:00 - 13:30	0.50	REAM	1	DRLIN1	REAM F/ 5141' TO 5186'
	13:30 - 14:00	0.50	OTH		DRLIN1	CHANGE OUT SAVER SUB
	14:00 - 21:00	7.00	REAM	1	DRLIN1	REAM F/ 5486' TO 5823' (10' FILL)
	21:00 - 06:00	9.00	DRL	2	DRLIN1	DIRECTIONAL DRILL F/ 5823' TO 5898' ROP=8.3 FPH
	06:00 - 14:30	8.50	DRL	2	DRLIN1	DIRECTIONAL DRILL F/ 5898' TO 5949' (SLIDE 5898'-5918', ROT 5918'-5928', SLIDE 5928'-5949') (ROP=6 FPH)
	14:30 - 15:00	0.50	RIG	2	DRLIN1	GREASE BLOCKS, SWIVEL, FUNCTION HYDRIL
	15:00 - 23:30	8.50	DRL	2	DRLIN1	DIRECTIONAL DRILL F/ 5949' TO 6027' (ROT 5649'-5964', SLIDE 5964'-5970') (ROP= 9.1 FPH)
	23:30 - 00:30	1.00	CIRC	1	DRLIN1	CIRC. BTMS UP, PUMP DRY PILL
	00:30 - 04:00	3.50	TRP	15	DRLIN1	TRIP OUT OF HOLE
9/15/2008	04:00 - 06:00	2.00	TRP	1	DRLIN1	L/D MUD, FLEX NMDC, GAP SUB, EMHO SUB, NMDC, MOTOR AND BIT
	06:00 - 10:00	4.00	TRP	2	DRLIN1	TRIP IN HOLE TO 5450'
	10:00 - 11:00	1.00	REAM	1	DRLIN1	WASH AND REAM F/ 5450' TO 5825'
	11:00 - 11:30	0.50	TRP	2	DRLIN1	TRIP OUT HOLE TO 5518'
	11:30 - 14:00	2.50	REAM	1	DRLIN1	WASH AND REAM F/ 5518' TO 6027'

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: DRILLING
 Contractor Name: Ensign Drilling USD
 Rig Name: ENSIGN

Start: 8/20/2008
 Rig Release:
 Rig Number: 57

Spud Date: 8/19/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/15/2008	14:00 - 15:30	1.50	CIRC	1	DRLIN1	PUMP SWEEP, CIRC. BTMS UP
	15:30 - 16:00	0.50	TRP	14	DRLIN1	SHORT TRIP 10 STANDS
	16:00 - 18:00	2.00	TRP	2	DRLIN1	LAYING DOWN SINGLES (PUMPING OUT OF HOLE)
	18:00 - 19:00	1.00	TRP	2	DRLIN1	TRIP IN HOLE TO 5455'
	19:00 - 20:00	1.00	CIRC	1	DRLIN1	MIX AND DISPLACE 45 BBL. 12 PPG PILL IN OPEN HOLE
	20:00 - 21:00	1.00	TRP	2	DRLIN1	TRIP IN HOLE TO 5657'
	21:00 - 22:00	1.00	CIRC	1	DRLIN1	MIX DISPLACEMENT PILL - 45BBL 12PPG IN PIPE
	22:00 - 23:30	1.50	REAM	1	DRLIN1	REAMING 5672'-5735', HAD TO WASH TO GET DOWN, LOST TOTAL RETURNS
	23:30 - 00:00	0.50	TRP	14	DRLIN1	TRIP TO BOTTOM 6027'
	00:00 - 02:00	2.00	CIRC	1	DRLIN1	COND AND CIRC, LOST TOTAL RETURNS, PUMP LCM SWEEP, REGAINED RETURNS
9/16/2008	02:00 - 04:00	2.00	CIRC	6	DRLIN1	BUILD VOLUME AND WORK PIPE
	04:00 - 06:00	2.00	TRP	14	DRLIN1	KELLEY BACK AND PULL 10 STANDS
	06:00 - 09:00	3.00	REAM	1	DRLIN1	SHORT TRIP 10 STANDS
	09:00 - 11:30	2.50	CIRC	1	DRLIN1	CIRC. BTMS UP, (SAFETY MEETING W/ LAYDOWN CREW)
	11:30 - 12:30	1.00	TRP	2	DRLIN1	TRIP OUT OF THE HOLE 8 STANDS (TIGHT SPOT FROM 5740' TO 5770')
	12:30 - 15:30	3.00	TRP	3	DRLIN1	LAY DOWN 4.5" DRILL PIPE
	15:30 - 16:00	0.50	TRP	2	DRLIN1	TRIP IN 8 STANDS
	16:00 - 17:30	1.50	OTH		DRLIN1	BREAK KELLY, PULL ROTATINGHEAD RUBBER
	17:30 - 19:00	1.50	TRP	3	DRLIN1	LAY DOWN 4.5" DRILL PIPE AND 4.5" HWDP
	19:00 - 19:30	0.50	BOP	1	DRLIN1	PULL WEAR BUSHING
	19:30 - 21:00	1.50	CSG	1	DRLIN1	RIG UP CASING CREW , HELD SAFETY MEETING
	21:00 - 04:30	7.50	CSG	2	DRLIN1	RUN 7" 26# HCP-110 CASING TO 6020'
	04:30 - 05:00	0.50	CSG	1	DRLIN1	RU 7" CIRC SWEDGE AND WORK PIPE RIG DOWN CASING CREW
	05:00 - 06:00	1.00	CIRC	1	DRLIN1	CIRC AND CONDITION FOR CEMENT WHILE WORKING PIPE, GOT CSG TO 6023', RU HES CEMENTERS
9/17/2008	06:00 - 06:30	0.50	RIG	7	CSGIN1	HELD SAFETY MEETING W/ CEMENTERS
	06:30 - 08:00	1.50	CMT	1	CSGIN1	RIG UP HALLIBURTON TO CEMENT 7" CASING
	08:00 - 14:30	6.50	CIRC	1	CSGIN1	WORK 7" CASING AND CIRC. (WAIT ON ANOTHER PUMP TRUCK)
	14:30 - 15:00	0.50	RIG	7	CSGIN1	HELD ANOTHER SAFETY MEETING W/ CEMENTERS
	15:00 - 18:30	3.50	CMT	2	CSGIN1	CEMENT W/ HALLIBURTON,, 30 BBL SUPERFLUSH, 20 BBL H2O,, HALLIBURTON HI-FILL 40 SACKS 28 BBL H2O @ 10.5 PPG,, HI-FILL LEAD CEMENT 300 SACKS 368 BBL H2O @ 11.0 PPG,,TAIL CEMENT 315 SACKS ,PREMIUM-CLASS G REG.38 BBL. H2O @ 15.8 PPG
	18:30 - 19:00	0.50	CMT	1	CSGIN1	RIG DOWN CEMENTERS
	19:00 - 21:00	2.00	BOP	1	CSGIN1	NIPPLE DOWN BOP TO SET 7" CASING SLIPS
	21:00 - 23:00	2.00	CSG	7	CSGIN1	SET 7" CASING SLIPS @ 150K, CUT OFF CASING AND DRESS TOP OF CUT OFF.
	23:00 - 02:30	3.50	BOP	1	CSGIN1	NIPPLE UP BOP AND CHANGE PIPE RAMS F/ 4.5" TO 3.5"
	02:30 - 06:00	3.50	BOP	1	CSGIN1	LAYDOWN 4.5" KELLY,PICKUP 3.5" 54' KELLY, (54" KELLY IS TO LONG) PICK UP SHORTER 3.5" KELLY AND READY FOR TEST, UPPER AND LOWER SAFETY VALVES, SAVER SUB
9/18/2008	06:00 - 09:00	3.00	BOP	2	DRLPRO	TEST PIPE RAMS, 250/5000 PSI, UPPER AND LOWER KELLY VALVES 250/5000 PSI, CASING TO 1500PSI F/ 30 MIN.
	09:00 - 09:30	0.50	BOP	1	DRLPRO	SET 7" WEAR BUSHING
	09:30 - 10:30	1.00	OTH		DRLPRO	INSTALL KELLY DRIVE BUSHINGS
	10:30 - 13:30	3.00	DRL	3	DRLPRO	PICKUP MWD, MOTOR, ORIENT MWD,SURFACE TEST MOTOR,MAKE UP BIT
	13:30 - 15:00	1.50	CSG	1	DRLPRO	RIG UP PICKUP MACH. AND GET FLOOR READY TO PICKUP 3.5" STRING

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22

Common Well Name: WRU GB 14G-4-8-22

Event Name: DRILLING

Contractor Name: Ensign Drilling USD

Rig Name: ENSIGN

Start: 8/20/2008

Rig Release:

Rig Number: 57

Spud Date: 8/19/2008

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/18/2008	15:00 - 00:00	9.00	TRP	2	DRLPRO	PICKUP 3.5" STRING TO FINISH DRILLING THE G-1 LIME
	00:00 - 01:00	1.00	CSG	1	DRLPRO	RIG DOWN PICKUP MACH.
	01:00 - 02:00	1.00	DRL	1	DRLPRO	DRILL CEMENT STRINGERS F/ 5875 TO 5913
	02:00 - 03:30	1.50	OTH		DRLPRO	RIGUP KELLY SPINNERS, INSTALL ROTATING HEAD RUBBER & CENTER STACK
9/19/2008	03:30 - 04:00	0.50	DRL	1	DRLPRO	DRILL CEMENT STRINGERS F/ 5913' TO 5977'
	04:00 - 06:00	2.00	DRL	1	DRLPRO	DRILL SHOE TRACK F/5977' TO 6023'
	06:00 - 06:30	0.50	DRL	1	DRLPRO	DRILL F/ 6023' TO 6035'
	06:30 - 07:00	0.50	EQT	2	DRLPRO	PREFORM F.I.T (326 PSI ,,10.0 PPG EQUIVALANT MUD WT) HELD BOP DRILL
9/20/2008	07:00 - 10:30	3.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6035' TO 6102' , ROP= 19.1 FPH
	10:30 - 12:30	2.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6102' TO 6112' ,,ROP=5 FPH
	12:30 - 18:00	5.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6112' TO 6202' , ROP= 16.3 FPH
	18:00 - 19:00	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6202' TO 6208, ROP= 6 FPH
	19:00 - 19:30	0.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6208' TO 6234' , ROP = 52 FPH
	19:30 - 20:00	0.50	RIG	2	DRLPRO	RIG SERVICE, GREASE CROWN,BOCKS,SWIVEL,FUNCTION HYDRIL, (HELD BOP DRILL)
	20:00 - 21:00	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6234' TO 6250' ,, ROP = 16 FPH
	21:00 - 22:00	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6250' TO 6261' ,,ROP = 11 FPH
	22:00 - 23:30	1.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6261' TO 6298' ,,ROP = 24.6 FPH
	23:30 - 01:00	1.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6298' TO 6312' ,, ROP = 9.3 FPH
	01:00 - 06:00	5.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6312' TO 6425' ,, ROP = 22.6 FPH
	06:00 - 07:00	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6425' TO 6454' ,,ROP = 29 FPH
	07:00 - 09:30	2.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6454' TO 6465' ,, ROP = 4.4 FPH
	09:30 - 10:30	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6465' TO 6489' ,, ROP = 24' FPH
	10:30 - 13:00	2.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6489' TO 6507' ,,ROP= 7.2 FPH
9/21/2008	13:00 - 14:00	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6507' TO 6521' ,, ROP = 14 FPH
	14:00 - 14:30	0.50	DRL	2	DRLPRO	RIG SERVICE, GREASE BLOCKS, SWIVEL, FUNCTION HYDRIL
	14:30 - 15:00	0.50	CIRC	5	DRLPRO	CIRC. UP SAMPLE @ 6510'
	15:00 - 15:30	0.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6521' TO 6536' ,,ROP= 30 FPH
	15:30 - 18:00	2.50	WOT	2	DRLPRO	CIRC. AND WAIT ON ORDERS
	18:00 - 19:00	1.00	CIRC	1	DRLPRO	CIRC. BUILD DRY PILL, FILL TRIP TANK, PUMP DRY PILL
	19:00 - 23:00	4.00	TRP	2	DRLPRO	TRIP OUT OF HOLE, TO CHANGE BIT AND MWD & RUN BOND LOG
	23:00 - 00:00	1.00	TRP	1	DRLPRO	LAY DOWN MWD, BIT
	00:00 - 03:00	3.00	LOG	2	DRLPRO	SAFETY MEETING W/ LOGGERS, R/U LOGGERS AND RUN BOND LOG (CEMENT TOP @ 2420')
	03:00 - 04:30	1.50	TRP	1	DRLPRO	SWAP OUT MUD MOTORS,PICKUP MWD & SCRIBE, SURFACE TEST MUD MOTOR,M/U BIT #7
	04:30 - 06:00	1.50	TRP	2	DRLPRO	TRIP IN HOLE W/ BIT # 7,
	06:00 - 06:30	0.50	TRP	2	DRLPRO	FUNCTION CROWN-O-MATIC AND TRIP IN HOLE
	06:30 - 07:00	0.50	OTH		DRLPRO	INSTALL ROTATING HEAD RUBBER& CORROSION RINGS, FILL PIPE
	07:00 - 07:30	0.50	TRP	2	DRLPRO	TRIP IN HOLE TO 5800'
	07:30 - 09:00	1.50	RIG	6	DRLPRO	SLIP AND CUT DRILLING LINE (150')
9/22/2008	09:00 - 09:30	0.50	TRP	2	DRLPRO	RESET CROWN-O-MATIC AND TRIP IN HOLE
	09:30 - 13:00	3.50	OTH		DRLPRO	RELOG HOLE W/ GAMMA F/ 6127' TO 6327'
	13:00 - 13:30	0.50	TRP	2	DRLPRO	PULL 3 STANDS
	13:30 - 15:30	2.00	DRL	7	DRLPRO	TROUGH HOLE F/ SIDE TRACK @ 6141'
	15:30 - 00:00	8.50	DRL	2	DRLPRO	TIME DRILLING F/ 6170' TO 6176 @ ONE MIN A FOOT
	00:00 - 06:00	6.00	DRL	3	DRLPRO	TIME DRILLING F/6176' TO 6185' @ 2 MIN A FOOT
	06:00 - 11:00	5.00	DRL	2	DRLPRO	TIME DRILL F/ 6185' TO 6195' 2 FPH
	11:00 - 11:30	0.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6195' TO 6202' ,,ROP= 14 FPH
	11:30 - 13:00	1.50	CIRC	5	DRLPRO	CIRC. UP SAMPLE @ 6202

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: DRILLING
 Contractor Name: Ensign Drilling USD
 Rig Name: ENSIGN

Start: 8/20/2008
 Rig Release: Group:
 Spud Date: 8/19/2008
 End:
 Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/22/2008	13:00 - 14:00	1.00	DRL	2	DRLPRO	ROTATE DRILL F/ 6202' TO 6218' „ROP = 16 FPH
	14:00 - 17:00	3.00	DRL	2	DRLPRO	HAND DRILL ATTEMPT TO GET BACK IN SIDETRACK #1 @ 1' EVERY 2 MIN.
	17:00 - 18:00	1.00	TRP	2	DRLPRO	LAY DOWN 4 JT. DRILL PIPE
	18:00 - 18:30	0.50	DRL	3	DRLPRO	BUILD TROUGH F/ SIDETRACK F? 6128' TO 6140'
	18:30 - 21:30	3.00	DRL	2	DRLPRO	TIME DRILL F/ 6140' TO 6141' @ 5 MIN. A FOOT
	21:30 - 22:30	1.00	DRL	3	DRLPRO	LAY DOWN 1 JT. D.P. AND REBUILD TROUGH F/ 6110' TO 6140'
	22:30 - 00:00	1.50	DRL	2	DRLPRO	TIME DRILL F/ 6140' TO 6141' (STACKED ON 20k PICKUP 10 FT. AND RESTART)
	00:00 - 01:00	1.00	DRL	2	DRLPRO	TIME DRILL F/ 6141 TO 6141.8 (WT STACKING ON BIT)
	01:00 - 01:30	0.50	TRP	2	DRLPRO	LAY DOWN 5 JTS. D.P.
	01:30 - 03:00	1.50	REAM	1	DRLPRO	REAM HOLE F/ 5964' TO 6110' (REAM EACH JT. TWICE)
9/23/2008	03:00 - 06:00	3.00	DRL	2	DRLPRO	TIME DRILL F/ 6140-41'
	06:00 - 07:00	1.00	CIRC	1	DRLPRO	CIRC., FILL TRIP TANK, BUILD DRY PILL, AND PUMP DRY PILL
	07:00 - 12:00	5.00	TRP	2	DRLPRO	FUNCTION CROWN-O-MATIC, TRIP OUT OF HOLE
	12:00 - 13:30	1.50	TRP	1	DRLPRO	CHANGE OUT MOTOR ,BIT, ORIENT MWD, SURFACE TEST MOTOR, P/U SHOCK SUB
	13:30 - 14:00	0.50	RIG	1	DRLPRO	RIG SERVICE, FUNCTION PIPE RAMS
9/24/2008	14:00 - 17:00	3.00	TRP	2	DRLPRO	TRIP IN HOLE 15 STANDS, PICK UP AGATATOR & SHOCK SUB
	17:00 - 18:00	1.00	OTH		DRLPRO	INSTALL ROTATINGHEAD RUBBER
	18:00 - 19:30	1.50	TRP	2	DRLPRO	FINISH TRIP IN HOLE
	19:30 - 20:30	1.00	DRL	3	DRLPRO	ORIENTATE TOOLFACE IN TROUGH
	20:30 - 06:00	9.50	DRL	2	DRLPRO	TIME DRILL F/6141 TO 6147 „TIME DRILL @ 1 FPH
	06:00 - 08:30	2.50	DRL	2	DRLPRO	TIME DRILL F/ 6148' TO 6149' @ 1 FOOT PER HR.
	08:30 - 11:00	2.50	DRL	2	DRLPRO	TIME DRILL F/ 6149' TO 6155' @ 2 FOOT PER HR.
	11:00 - 15:00	4.00	DRL	2	DRLPRO	TIME DRILL F/ 6155' TO 6163' @ 3 FOOT PER. HR.
	15:00 - 21:00	6.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6163' TO 6195' „ROP = 5.3 FEET PER HR.
	21:00 - 21:30	0.50	DRL	2	DRLPRO	ROTATE DRILL F/ 6195' TO 6203' „ROP = 16 FEET PER HR.
9/25/2008	21:30 - 22:00	0.50	RIG	1	DRLPRO	RIG SERVICE, GREASE BLOCKS, SWIVEL FUNCTION PIPE RAMS
	22:00 - 23:30	1.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6203' TO 6218' „ROP = 10 FEET PER HR.
	23:30 - 00:30	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6218' TO 6235' „ROP = 17 FEET PER HR.
	00:30 - 03:30	3.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6235' TO 6266' „ROP = 10.3 FEET PER HR.
	03:30 - 06:00	2.50			DRLPRO	ROTARY DRILL F/ 6266' TO 6298' „ROP = 12.8 FEET PER. HR.
	06:00 - 07:00	1.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6298' TO 6318' „ROP = 20 FEET PER HR.
	07:00 - 09:00	2.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6318' TO 6345' „ROP = 13.5 FEET PER HR.
	09:00 - 10:30	1.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6345' TO 6377' „ROP = 21.3 FEET PER HR.
	10:30 - 13:30	3.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6377' TO 6393' „ROP = 5.3 FEET PER HR.
	13:30 - 14:00	0.50	RIG	1	DRLPRO	RIG SERVICE, GREASE BLOCKS SWIVEL, FUNCTION PIPE RAMS
9/26/2008	14:00 - 17:00	3.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6393' TO 6425' „ROP = 10.6 FEET PER HR.
	17:00 - 19:00	2.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6425' TO 6457' „ROP = 16 FEET PER HR.
	19:00 - 20:00	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6457' TO 6472' „ROP = 15 FEET PER HR.
	20:00 - 02:00	6.00	DRL	2	DRLPRO	ROTARY DRILL F/ 6472' TO 6615' „ROP = 23.8 FEET PER HR.
	02:00 - 03:00	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6615' TO 6630' „ROP=15 FEET PER HR.
	03:00 - 04:30	1.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6630' TO 6679' „ROP = 32.6 FEET PER HR.
	04:30 - 06:00	1.50	DRL	2	DRLPRO	SLIDE DRILL F/ 6679' TO 6686' „ROP = 3.5 FEET PER HR.
	06:00 - 10:30	4.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6686' TO 6775' „ROP = 19.7 FEET PER HR.
	10:30 - 11:30	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 6775' TO 6781' „ROP = 6 FEET PER HR.
	11:30 - 13:00	1.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6781' TO 6806' „ROP = 16.6 FEET PER HR.
9/26/2008	13:00 - 13:30	0.50	RIG	1	DRLPRO	RIG SERVICE, GREASE BLOCKS, SWIVEL AND FUNCTION PIPE RAMS
	13:30 - 01:00	11.50	DRL	2	DRLPRO	ROTARY DRILL F/ 6806' TO 7108' „ROP = 26.2 FEET PER HOUR
	01:00 - 02:00	1.00	DRL	2	DRLPRO	SLIDE DRILL F/ 7108' TO 7115' „ROP = 7 FEET PER HR.
	02:00 - 06:00	4.00	DRL	2	DRLPRO	ROTARY DRILL F/ 7115' TO 7230' „ROP = 28.7 FEET PER HR.

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22

Common Well Name: WRU GB 14G-4-8-22

Event Name: DRILLING

Contractor Name: Ensign Drilling USD

Rig Name: ENSIGN

Start: 8/20/2008

Rig Release:

Rig Number: 57

Spud Date: 8/19/2008

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/27/2008	06:00 - 09:00	3.00	DRL	2	DRLPRO	DRILLING F/ 7230' TO 7315', ROP @ 28'/HR.
	09:00 - 10:00	1.00	TRP	14	DRLPRO	SHORT TRIP F/ 7315' TO 6751' 6 STDS.
	10:00 - 10:30	0.50	DRL	2	DRLPRO	SLIDE F/ 7315' TO 7322', ROP @ 14'/HR.
	10:30 - 12:30	2.00	DRL	1	DRLPRO	DRILLING F/ 7322' TO 7379', ROP @ 28.5'/HR.
	12:30 - 13:00	0.50	RIG	1	DRLPRO	RIG SERVICE / FUNCTION ANNULAR
	13:00 - 13:30	0.50	DRL	2	DRLPRO	SLIDE F/ 7379' TO 7388', ROP @ 18'/HR.
	13:30 - 15:00	1.50	DRL	1	DRLPRO	DRILLING F/ 7388' TO 7431', ROP @ 17'/HR.
	15:00 - 16:00	1.00	DRL	2	DRLPRO	SLIDE F/ 7431' TO 7442', ROP @ 11'/HR.
	16:00 - 20:30	4.50	DRL	1	DRLPRO	DRILLING F/ 7442' TO 7538', ROP @ 21.3' /HR
	20:30 - 21:30	1.00	DRL	2	DRLPRO	SLIDE F/ 7538' TO 7553', ROP @ 15' / HR
	21:30 - 23:00	1.50	DRL	2	DRLPRO	DRILLING F/ 7553' TO 7591', ROP @ 25.3' /HR
	23:00 - 00:00	1.00	CIRC	1	DRLPRO	FILL TRIP TANK, BUILD AND PUMP DRY SLUG
	00:00 - 06:00	6.00	TRP	2	DRLPRO	TRIP OUT HOLE, LAY DOWN 2 JTS. ,L/D AGITATOR AND SHOCK SUB
9/28/2008	06:00 - 07:30	1.50	TRP	1	DRLPRO	PICK UP ORIENT MWD & SURFACE TEST MUD MOTOR
	07:30 - 09:30	2.00	EQT	2	DRLPRO	INJECTION TEST / 20 BBLs. TOTAL, PRESSURED UP TO 700 PSI W/ 3 BBLs. IN, DROPE TO 400 PSI W/ 13 BBLs. IN, DROPE TO 350 PSI W/ 18 BBLs. IN, HELD 400 PSI WHEN PUMP SHUT OFF W/ A TOTAL OF 20 BBLs. PUMPED. PUMP RATE THROUGH JOB WAS 3 BBLs./MIN
	09:30 - 10:00	0.50	RIG	1	DRLPRO	RIG SERVICE / FUNCTION TEST PIPE RAMS
	10:00 - 10:30	0.50	TRP	2	DRLPRO	TRIP IN HOLE F/ SURFACE TO 1500'
	10:30 - 13:30	3.00	OTH		DRLPRO	WAIT ON SHOCK SUB & AGITATOR / FIRST CALL WAS MADE @ 5:30 AM TO NOV IN VERNAL. IT WAS SAID TO BE A ETA OF 1.5 HRS. / SOS TRUCKING WAS THE TRUCKING COMPANY
	13:30 - 14:00	0.50	TRP	2	DRLPRO	MAKE UP AGITATOR & SHOCK SUB / SURFACE TEST
	14:00 - 16:30	2.50	TRP	2	DRLPRO	TRIP IN HOLE F/ 1500' TO 6205'
	16:30 - 19:30	3.00	REAM	1	DRLPRO	OREINT & WORK THROUGH SIDE TRACK
	19:30 - 20:30	1.00	TRP	2	DRLPRO	TRIP IN HOLE F/ 6205' TO 7510'
	20:30 - 22:00	1.50	REAM	1	DRLPRO	SAFETY REAM F/ 7510' TO 7591'
	22:00 - 01:00	3.00	DRL	2	DRLPRO	ROTARY DRILL F/ 7591' TO 7654', ROP=21,FPH
	01:00 - 02:30	1.50	DRL	2	DRLPRO	SLIDE DRILL F/ 7655' TO 7666', ROP=7.3 FPH
	02:30 - 06:00	3.50	DRL	2	DRLPRO	ROTARY DRILL F/ 7666' TO 7750', ROP=24 FPH
9/29/2008	06:00 - 13:30	7.50	DRL	1	DRLPRO	DRILLING F/ 7750' TO 7910', ROP @ 21'/HR.
	13:30 - 14:00	0.50	RIG	1	DRLPRO	RIG SERVICE / FUNCTION PIPE RAMS (LOWER)
	14:00 - 14:30	0.50	DRL	2	DRLPRO	SLIDE F/ 7910' TO 7915'
	14:30 - 17:30	3.00	DRL	1	DRLPRO	DRILLING F/ 7915' TO 7986', ROP @ 23'/HR.
	17:30 - 18:00	0.50	DRL	1	DRLPRO	SLIDE F/ 7974' TO 7977', ROP @ 6 FPH
	18:00 - 04:30	10.50	DRL	2	DRLPRO	DRILLING F/ 7977' TO 8230', ROP @ 24 FPH
	04:30 - 06:00	1.50	DRL	2	DRLPRO	SLIDE F/ 8230' TO 8250', ROP @ 20 FPH
	06:00 - 12:30	6.50	DRL	1	DRLPRO	DRILLING F/ 8250' TO 8358', ROP @ 17'/HR
9/30/2008	12:30 - 13:00	0.50	RIG	1	DRLPRO	RIG SERVICE
	13:00 - 13:30	0.50	DRL	2	DRLPRO	SLIDE F/ 8358' TO 8364' ROP @ 12'/HR
	13:30 - 15:30	2.00	DRL	1	DRLPRO	DRILLING F/ 8364' TO 8390', ROP @ 13'/HR.
	15:30 - 16:30	1.00	TRP	14	DRLPRO	SHORT TRIP F/ 8390' TO 7870'
	16:30 - 18:30	2.00	DRL	1	DRLPRO	DRILLING F/ 8390' TO 8406' ROP @ 8 FPH
	18:30 - 19:00	0.50	DRL	2	DRLPRO	SLIDE F/ 8406' TO 8415' ROP @ 18FPH
	19:00 - 20:00	1.00	DRL	2	DRLPRO	DRILLING F/ 8415' TO 8427' ROP @ 12 FPH
	20:00 - 20:30	0.50	DRL	2	DRLPRO	SLIDE F/ 8427' TO 8432' ROP @ 10 FPH
	20:30 - 00:00	3.50	DRL	2	DRLPRO	DRILLING F/ 8432' TO 8496' ROP @ 18.2 FPH
	00:00 - 01:00	1.00	DRL	2	DRLPRO	SLIDE F/ 8496' TO 8506' ROP @ 10 FPH
	01:00 - 06:00	5.00	DRL	2	DRLPRO	DRILLING F/ 8506' TO 8613' ROP @ 21.4 FPH

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: DRILLING
 Contractor Name: Ensign Drilling USD
 Rig Name: ENSIGN

Start: 8/20/2008
 Rig Release:
 Rig Number: 57

Spud Date: 8/19/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
10/1/2008	06:00 - 06:30	0.50	DRL	2	DRLPRO	SLIDE F/ 8613' TO 8625', ROP @ 24'HR.
	06:30 - 11:00	4.50	DRL	1	DRLPRO	DRILLING F/ 8625' TO 8709', ROP @ 19'/HR.
	11:00 - 12:00	1.00	DRL	2	DRLPRO	SLIDE F/ 8709' TO 8717', ROP @ 8'/HR.
	12:00 - 14:30	2.50	DRL	1	DRLPRO	DRILLING F/ 8717' TO 8772', ROP @ 22'/HR.
	14:30 - 15:00	0.50	RIG	1	DRLPRO	RIG SERVICE / FUNCTION HYDRIL
	15:00 - 16:00	1.00	DRL	2	DRLPRO	SLIDE F/ 8772' TO 8782', ROP @ 10'/HR.
	16:00 - 18:30	2.50	DRL	1	DRLPRO	DRILLING F/ 8782' TO 8836' / TD WELL
	18:30 - 19:30	1.00	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP FOR SAMPLE / MIX & PUMP DRY JOB
	19:30 - 21:30	2.00	TRP	14	DRLPRO	SHORT TRIP OUT OF HOLE F/ 8836' TO 6000' / UP IN SHOE
	21:30 - 01:00	3.50	TRP	14	DRLPRO	TRIP IN THE HOLE F/ 6000' TO 8500'
	01:00 - 06:00	5.00	REAM	1	DRLPRO	WASH & REAM TIGHT SPOTS @ 7600' TO 7700' & 8500' TO 8836'
10/2/2008	06:00 - 09:00	3.00	REAM	1	DRLPRO	REAMMING F/ 8600' TO 8836'
	09:00 - 10:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP & MIX, PUMP DRY JOB
	10:30 - 13:00	2.50	TRP	2	DRLPRO	SHORT TRIP F/ 8836' TO 7600
	13:00 - 14:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP & MIX, PUMP DRY JOB
	14:30 - 23:30	9.00	TRP	2	DRLPRO	TRIP OUT F/ 8836' TO BIT / LAY DOWN DIRECTIONAL BHA / SLM ON WAY OUT
	23:30 - 01:30	2.00	CSG	1	DRLPRO	HOLD SAFETY MEETING W/ WEATHERFORD CASING CREW & RIG UP CASING EQUIPMENT
	01:30 - 04:00	2.50	CSG	2	DRLPRO	RUN 2734' OF 4 1/2" 11.6# P-110 LT&C PRODUCTION CASING
	04:00 - 06:00	2.00	CSG	1	DRLPRO	PICK UP SETTING ADAPTER & RIG DOWN CASING CREW

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Page 4 of 6

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
Common Well Name: WRU GB 14G-4-8-22
Event Name: COMPLETION
Contractor Name: Rocky Mtn Well Service
Rig Name: ROCKY MTN WS

Start: 10/8/2008
Rig Release:
Rig Number: 3
Spud Date: 8/19/2008
End: 11/12/2008
Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
10/30/2008	06:00 - 16:00	10.00	CMT	3		<p>pump 250 sxs Class 'G' neat cmt squeeze. Had circ throughout job. Pull up to 800' & reverse circ out tbg w/ 10 bbls KCL water. Pressure well to 400 psi & SWIFN.</p> <p>24 Hour Forecast: Run CBL & determine cement top.</p>
10/31/2008	06:00 - 16:00	10.00	LOG	4		<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 10/30/08 @ 7:00 AM - Open well. RIH f/ 800' w/ 2-7/8" tbg, tag cmt @ 1515'. POOH w/ 2-7/8" tbg. RU Cutters WL & run CBL f/ 1490' - 400'. Tagged cmt top in 7" @ 1494'. Cement top in annulus @ 1000', very spotty bond from top to about 750'. Perforate 7' w/ 8 holes @ 900-902'. RD Cutters WL. RIH w/ 13 stands 2-7/8" tbg to 860'. RU ProPetro cementers. Pressured up to 1500 psi on squeeze perfs. No break or circ up 7" annulus. RD cementers & POOH w/ 13 stands 2-7/8" tbg. SWIFN.</p> <p>24 Hour Forecast: Acidize to get circulation then cement.</p>
11/3/2008	06:00 - 16:00	10.00	STIM	1		<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 10/31/08 @ 7:00 AM - RIH w/ 14 stands of 2-7/8" tbg to 910'. Rig up Superior and spot 600 gals of 15% HCL across perfs @ 900' - 902'. POOH w/ tbg. Pump acid into squeeze perfs @ 1.7 BPM & 1500 psi. No circ up 7" annulus. RD acid crew. RIH w/ 2-7/8" tbg to 1032' & circ up any remaining acid from well. Pull up to 891' & spot 75 sxs Class 'G' cement plug. POOH w/ tbg & displace cmt into perfs @ 900' - 902'. Leave 830 psi on squeeze. SWIFW. Rig down cementers.</p> <p>24 Hour Forecast: Drill out cement.</p>
11/4/2008	06:00 - 16:00	10.00	STIM	1		<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/3/08 @ 7:00 AM - RIH w/ 6-1/8" drag bit & 2-7/8" workstring, tag cement @ 830'. RU Power Swivel and begin drilling. Drill out cement from 830' - 910'; 1480' - 1520' & 2041' - 2250'. Circ csg clean, drain lines. SDFN @ 5:00 PM.</p> <p>24 Hour Forecast: Continue to drill out cement, retrieve RBPs..</p>
11/5/2008	06:00 - 16:00	10.00	DRL	4		<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/4/08 @ 7:00 AM finish drilling out cement from 2250' to 2350'. RIH & tag 7" RBP @ 2440', circ clean, POOH w/ 6-1/8" bit. RIH w/ retrieving tool, circ on to RBP @ 2440'. POOH w/ retrieving tool, did not have RBP. RIH w/ retrieving tool, and attempt to latch on to RBP, no success. Circ out cement & pieces of CICR, POOH w/ tbg & retrieving tool. Drain up, secure well and SDFN @ 5:00 PM.</p> <p>24 Hour Forecast: Retrieve RBP.</p>

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: COMPLETION
 Contractor Name: Rocky Mtn Well Service
 Rig Name: ROCKY MTN WS

Start: 10/8/2008 Spud Date: 8/19/2008
 Rig Release: End: 11/12/2008
 Group:
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
11/5/2008	06:00 - 16:00	10.00	DRL	4		Casing Size: 7" 26# P-110 Completion
11/6/2008	06:00 - 16:00	10.00	DRL	4		On 11/5/08 @ 7:00 AM RIH w/ retrieving tool and 2-7/8" workstring, circ over & release RBP @ 2440', POOH. RIH w/ retrieving tool & 2-7/8" workstring, circ out drilling mud, release RBP @ 5010', pull up w/ RBP to 1500', secure well, drain up lines, SDFN @ 5:00 PM. 24 Hour Forecast: RIH w/ tbg to TD, acidize.
11/7/2008	06:00 - 16:00	10.00	STIM	1		Casing Size: 7" 26# P-110 Completion On 11/6/08 @ 7:00 AM finish POOH w/ RBP. PU & RIH w/ 2980' 2-3/8" & 2-7/8" workstring. RIH to end of 4-1/2" liner @ 8707'. Pull up to 8560'. RU acid crew, pump 4000 gals 15% HCL, flush w/ 47 bbls 2% KCL. Pull up to 7900', pump 4000 gals 15% HCL, flush w/ 30 bbls 2% KCL & 15 bbls 10# brine. Pull up to 7460', pump 4000 gals 15% HCL, flush w/ 40 bbls 2% KCL, secure well, drain up lines. SDFN. 24 Hour Forecast: Finish acid job, lay down workstring. PU & RIH w/ production tbg.
11/8/2008	06:00 - 16:00	10.00	STIM	1		Casing Size: 7" 26# P-110 Completion On 11/7/08 @ 7:00 AM - 0 psi on tbg & csg, open well, pull up to 7020'. RU acid crew, pump 4000 gals 15% HCL, flush w/ 30 bbls 2% KCL & 10 bbls 10# brine. Pull up to 6560', pump 4000 gals 15% HCL, flush 30 bbls 2% KCL & 10 bbls 10# brine. Pull up to 6030', pump 4000 gals 15% HCL, flush tbg w/ 30 bbls 2% KCL & 10 bbls 10# brine. RD acid crew. POOH w/ workstring, laying down 2-7/8" tbg, 2-3/8" tbg & 3-3/4" bit. SDFN @ 4:00 PM. 24 Hour Forecast: RIH w/ production tbg, swab back acid.
11/11/2008	06:00 - 16:00	10.00	BOP	1		Casing Size: 7" 26# P-110 Completion On 11/10/08 @ 7:00 AM - PU, tally & rabbit in hole w/ 2-7/8" production string. ND BOP's, set anchor, land tbg w/ #12000 tension. NU WH, RU swab equipment. Made 11 swab runs, recovered 57 bbls fluid, no oil. IFL @ 750', FFL @ 950', final Ph 6. SDFN @ 5:00 PM. 24 Hour Forecast: RIH swab back acid, run rods & pump.
11/12/2008	06:00 - 16:00	10.00	SWAB	1		Casing Size: 7" 26# P-110 Completion On 11/11/08 @ 7:00 AM - Swab tbg, made 39 runs & recovered 212 bbls fluid. IFL @ 750'. FFL @ 650'. Final Ph = 4. Started getting oil shows after swabbing back 163 bbls, final oil cut 90+%. RD swab. SDFN @ 4:00 PM. 24 Hour Forecast: Run rods & pump. RDMO. Casing Size: 7" 26# P-110

Operations Summary Report

Legal Well Name: WRU GB 14G-4-8-22
 Common Well Name: WRU GB 14G-4-8-22
 Event Name: COMPLETION
 Contractor Name: Rocky Mtn Well Service
 Rig Name: ROCKY MTN WS

Start: 10/8/2008 Spud Date: 8/19/2008
 Rig Release: End: 11/12/2008
 Rig Number: 3 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
11/12/2008	06:00 - 16:00	10.00	SWAB	1		Tbg Detail KB 17.0 Streach 1.0 161 Jts 2-7/8" Tbg 5234.59 7" B-2 TAC 2.30 4 jts Boronized 2-7/8" 123.73 PSN 1.10 1 jt 2-7/8" J-55 Tbg 32.97 EOT @ 5412.69 Completion On 11/12/08 @ 7:00 AM 50# on tbg, open well, tbg flowing oil to tank. RU Hot Oiler, flush tbg w/ 75 bbls 2% KCL. PU & bucket test new pump - OK. RIH w/ rods & pump, seat & space out, fill tbg w/ 6 bbls water. Long stroke pump from 0 to 800# in 3 strokes, good test, good pump action. Clamp off rods 12" above tag. RDMO @ 5:00 PM.
11/13/2008	06:00 - 16:00	10.00	LOC	4		FINAL REPORT Casing Size: 7" 26# P-110 Tbg Detail KB 17.0 Streach 1.0 161 Jts 2-7/8" Tbg 5234.59 7" B-2 TAC 2.30 4 jts Boronized 2-7/8" 123.73 PSN 1.10 1 jt 2-7/8" J-55 Tbg 32.97 EOT @ 5412.69 Rod Detail 1 1/2" x 26' Polish Rod 1- 2', 1 - 4' x 7/8" Ponys 73 - 7/8" Slick 136 - 3/4" Slick 5 - 3/4" Guided Pump 2-1/2" x 1 3/4" x 20 x 23 x 25 RHAC #2374 Max Stroke 221"

43-047-40097



**Scientific
Drilling**

Directional Survey Certification

7327 West Barton Road

Casper, WY 82604

(307)-472-6621 Fax (307) 472-5439

Operator	Questar Exploration & Production
Well Name & No.	WRU GB 14G-4-8-22
County & State	Uintah County, UT
SDI Job No.	41HEF0808712
Rig	Ensign 57

I, Julie Cruse, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 5045 feet to a measured depth of 8836 feet is true and correct as determined from all available records.

Julie Cruse
Signature

7-Nov-08
Date

Julie Cruse
Rockies Region Engineer
Scientific Drilling - Rocky Mountain District

RECEIVED

NOV 12 2008

DIV. OF OIL, GAS & MINING



Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: OH

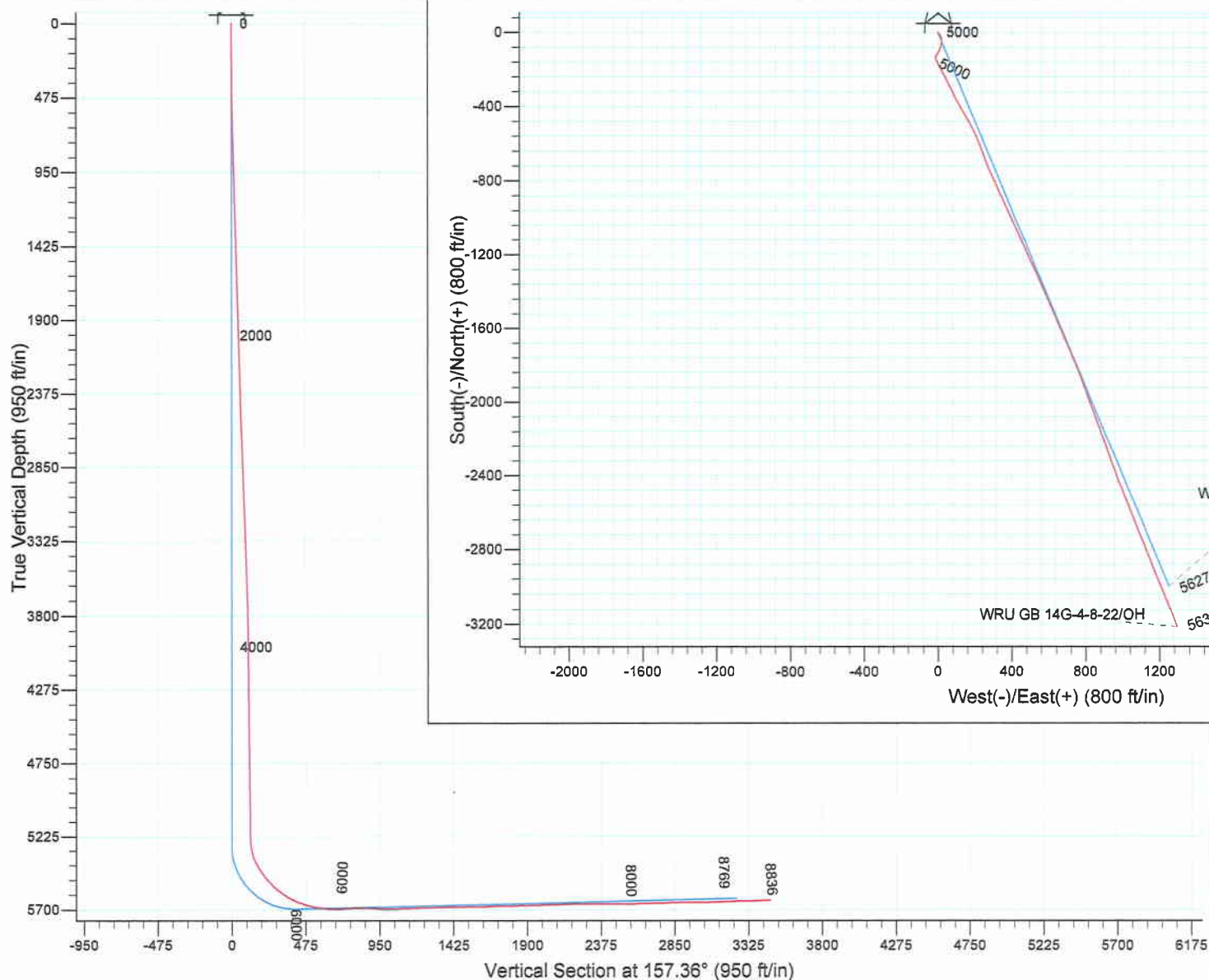
Questar Exploration & Production

M Azimuths to True North
Magnetic North: 11.42°

Magnetic Field
Strength: 52715.4snT
Dip Angle: 66.08°
Date: 9/2/2008
Model: IGRF2005-10

WELL DETAILS: WRU GB 14G-4-8-22

GL 5171' & RKB 16' @ 5187.00ft (Ensign 57) 5171.00
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 666845.53 2573945.00 40° 8' 45.900 N 109° 26' 48.200 W



Design: OH (WRU GB 14G-4-8-22/OH)
Created By: Julie Cruse Date: 2008-11-06
PROJECT DETAILS: Uintah County, UT NAD27
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302
System Datum: Mean Sea Level
Local North: True North



Scientific Drilling
Rocky Mountain Operations

Questar Exploration & Production

Uintah County, UT NAD27

WRU GB

WRU GB 14G-4-8-22

OH

Design: OH

Standard Survey Report

06 November, 2008

Scientific Drilling

Survey Report

Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well WRU GB 14G-4-8-22
TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User DB

Project Uintah County, UT NAD27

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Utah Central 4302

System Datum: Mean Sea Level

Site WRU GB,

Site Position: Northing: 666,889.69 ft Latitude: 40° 8' 45.440 N
From: Lat/Long Easting: 2,577,882.01 ft Longitude: 109° 25' 57.500 W
Position Uncertainty: 0.00 ft Slot Radius: in Grid Convergence: 1.32 °

Well WRU GB 14G-4-8-22, 600' FSL 2321' FWL Sec 4 T8S R22E

Well Position +N/-S 0.00 ft Northing: 666,845.53 ft Latitude: 40° 8' 45.900 N
+E/-W 0.00 ft Easting: 2,573,945.00 ft Longitude: 109° 26' 48.200 W
Position Uncertainty 0.00 ft Wellhead Elevation: ft Ground Level: 5,171.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	9/2/2008	11.42	66.08	52,715

Design OH

Audit Notes:

Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	157.36

Survey Program Date 11/6/2008

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
972.00	5,045.00	Survey #1 (OH)	MWD	MWD - Standard
5,223.00	5,984.00	Survey #2 - 8 3/4" Hole (OH)	MWD	MWD - Standard
6,049.00	6,481.00	Survey #3 - 6 1/8" Hole (OH)	MWD	MWD - Standard
6,098.00	8,836.00	Survey #4 - 6 1/8" Hole ST (OH)	MWD	MWD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
972.00	1.90	142.00	971.82	-12.70	9.92	15.54	0.20	0.20	0.00
1,842.00	1.70	174.80	1,841.41	-36.92	19.97	41.76	0.12	-0.02	3.77
2,495.00	2.00	188.70	2,494.08	-57.83	19.12	60.73	0.08	0.05	2.13
2,955.00	2.50	193.40	2,953.72	-75.52	15.59	75.70	0.12	0.11	1.02
3,429.00	3.30	206.43	3,427.12	-97.79	7.12	93.00	0.22	0.17	2.75
3,960.00	1.10	212.93	3,957.69	-115.76	-2.46	105.89	0.42	-0.41	1.22
4,521.00	1.20	211.13	4,518.58	-125.31	-8.42	112.41	0.02	0.02	-0.32
5,045.00	1.00	202.83	5,042.48	-134.22	-13.03	118.86	0.05	-0.04	-1.58

TIP

Scientific Drilling

Survey Report

Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well WRU GB 14G-4-8-22
TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,223.00	0.72	186.77	5,220.46	-136.76	-13.77	120.92	0.21	-0.16	-9.02
First SDI MWD Survey									
5,254.00	1.35	172.57	5,251.46	-137.32	-13.74	121.45	2.18	2.03	-45.81
5,285.00	5.48	158.30	5,282.40	-139.05	-13.15	123.28	13.50	13.32	-46.03
5,317.00	10.69	157.05	5,314.07	-143.21	-11.42	127.78	16.29	16.28	-3.91
5,348.00	15.98	156.69	5,344.22	-149.78	-8.61	134.93	17.07	17.06	-1.16
5,379.00	21.26	154.35	5,373.59	-158.77	-4.49	144.81	17.20	17.03	-7.55
5,410.00	26.21	152.71	5,401.96	-169.93	1.09	157.26	16.11	15.97	-5.29
5,441.00	31.67	152.90	5,429.08	-183.27	7.94	172.20	17.62	17.61	0.61
5,472.00	35.76	152.82	5,454.86	-198.58	15.79	189.35	13.19	13.19	-0.26
5,503.00	37.65	152.47	5,479.71	-215.03	24.30	207.82	6.13	6.10	-1.13
5,534.00	39.39	153.04	5,503.96	-232.20	33.14	227.06	5.73	5.61	1.84
5,565.00	42.61	152.90	5,527.36	-250.31	42.38	247.34	10.39	10.39	-0.45
5,596.00	46.39	153.27	5,549.46	-269.68	52.21	269.00	12.22	12.19	1.19
5,627.00	49.97	153.74	5,570.13	-290.36	62.51	292.05	11.60	11.55	1.52
5,658.00	53.51	153.50	5,589.32	-312.16	73.33	316.33	11.44	11.42	-0.77
5,689.00	57.31	152.55	5,606.92	-334.90	84.91	341.77	12.51	12.26	-3.06
5,720.00	60.83	152.29	5,622.85	-358.46	97.22	368.26	11.38	11.35	-0.84
5,752.00	64.50	152.65	5,637.54	-383.67	110.35	396.58	11.51	11.47	1.12
5,782.00	67.56	149.53	5,649.73	-407.65	123.61	423.82	13.94	10.20	-10.40
5,813.00	70.43	149.55	5,660.84	-432.60	138.28	452.49	9.26	9.26	0.06
5,844.00	73.53	149.55	5,670.43	-458.01	153.22	481.69	10.00	10.00	0.00
5,875.00	76.50	150.72	5,678.44	-483.97	168.12	511.40	10.25	9.58	3.77
5,906.00	79.62	152.76	5,684.86	-510.68	182.48	541.57	11.95	10.06	6.58
5,937.00	82.29	154.14	5,689.73	-538.07	196.16	572.11	9.67	8.61	4.45
5,969.00	84.42	156.14	5,693.43	-566.90	209.52	603.87	9.10	6.66	6.25
5,984.00	86.54	156.97	5,694.62	-580.62	215.47	618.82	15.17	14.13	5.53
Last Survey in 8 3/4" Hole									
6,049.00	92.05	160.41	5,695.42	-641.14	239.08	683.77	9.99	8.48	5.29
First Survey in 6 1/8" Hole									
6,066.00	92.02	160.12	5,694.81	-657.13	244.81	700.73	1.71	-0.18	-1.71
6,098.00	92.39	160.63	5,693.58	-687.25	255.55	732.67	1.97	1.16	1.59
6,131.00	92.39	156.91	5,692.20	-717.98	267.49	765.62	11.26	0.00	-11.27
6,163.00	89.90	156.46	5,691.56	-747.36	280.15	797.61	7.91	-7.78	-1.41
6,195.00	90.44	155.39	5,691.47	-776.57	293.20	829.60	3.75	1.69	-3.34
6,226.00	91.51	155.10	5,690.94	-804.72	306.18	860.57	3.58	3.45	-0.94
6,258.00	87.65	155.49	5,691.18	-833.79	319.55	892.54	12.12	-12.06	1.22
6,290.00	86.75	155.10	5,692.74	-862.82	332.91	924.49	3.06	-2.81	-1.22
6,321.00	87.38	154.85	5,694.33	-890.87	346.01	955.42	2.19	2.03	-0.81
6,353.00	88.36	155.43	5,695.52	-919.89	359.45	987.37	3.56	3.06	1.81
6,385.00	89.80	155.51	5,696.03	-949.00	372.74	1,019.35	4.51	4.50	0.25
6,417.00	92.62	155.40	5,695.35	-978.09	386.02	1,051.32	8.82	8.81	-0.34
6,449.00	93.43	155.32	5,693.67	-1,007.14	399.35	1,083.26	2.54	2.53	-0.25
6,479.00	91.24	155.94	5,692.44	-1,034.44	411.71	1,113.22	7.59	-7.30	2.07
6,511.00	91.65	155.68	5,691.64	-1,063.62	424.82	1,145.19	1.52	1.28	-0.81
6,543.00	91.81	156.04	5,690.67	-1,092.81	437.90	1,177.17	1.23	0.50	1.12
6,575.00	92.59	155.31	5,689.44	-1,121.95	451.07	1,209.13	3.34	2.44	-2.28
6,607.00	92.89	155.51	5,687.91	-1,151.01	464.38	1,241.08	1.13	0.94	0.62
6,639.00	91.31	155.82	5,686.74	-1,180.15	477.55	1,273.04	5.03	-4.94	0.97
6,671.00	91.41	155.68	5,685.98	-1,209.32	490.69	1,305.02	0.54	0.31	-0.44
6,703.00	91.01	155.45	5,685.31	-1,238.45	503.93	1,336.99	1.44	-1.25	-0.72
6,735.00	91.41	155.08	5,684.63	-1,267.50	517.31	1,368.97	1.70	1.25	-1.16
6,766.00	91.18	156.14	5,683.93	-1,295.73	530.11	1,399.94	3.50	-0.74	3.42
6,798.00	90.34	155.77	5,683.50	-1,324.95	543.15	1,431.93	2.87	-2.62	-1.16

Scientific Drilling

Survey Report

Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well WRU GB 14G-4-8-22
TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,830.00	90.37	156.36	5,683.31	-1,354.20	556.13	1,463.92	1.85	0.09	1.84
6,862.00	90.57	156.46	5,683.04	-1,383.52	568.93	1,495.92	0.70	0.62	0.31
6,894.00	90.81	156.58	5,682.66	-1,412.87	581.68	1,527.91	0.84	0.75	0.37
6,926.00	91.01	156.52	5,682.15	-1,442.22	594.42	1,559.90	0.65	0.62	-0.19
6,958.00	91.38	156.75	5,681.48	-1,471.59	607.10	1,591.89	1.36	1.16	0.72
6,990.00	92.05	156.47	5,680.52	-1,500.95	619.80	1,623.88	2.27	2.09	-0.87
7,022.00	91.95	156.93	5,679.41	-1,530.32	632.45	1,655.85	1.47	-0.31	1.44
7,053.00	92.19	156.55	5,678.29	-1,558.78	644.69	1,686.83	1.45	0.77	-1.23
7,085.00	92.32	156.51	5,677.03	-1,588.11	657.42	1,718.80	0.43	0.41	-0.12
7,115.00	90.84	156.73	5,676.20	-1,615.64	669.32	1,748.79	4.99	-4.93	0.73
7,147.00	90.91	156.67	5,675.71	-1,645.03	681.98	1,780.78	0.29	0.22	-0.19
7,179.00	91.01	156.71	5,675.18	-1,674.41	694.64	1,812.78	0.34	0.31	0.12
7,211.00	91.04	156.79	5,674.60	-1,703.81	707.27	1,844.77	0.27	0.09	0.25
7,243.00	90.87	157.19	5,674.07	-1,733.26	719.77	1,876.76	1.36	-0.53	1.25
7,275.00	92.25	157.68	5,673.20	-1,762.79	732.05	1,908.75	4.58	4.31	1.53
7,307.00	91.18	157.25	5,672.24	-1,792.34	744.31	1,940.74	3.60	-3.34	-1.34
7,338.00	91.68	158.04	5,671.47	-1,821.00	756.09	1,971.73	3.02	1.61	2.55
7,371.00	92.96	158.77	5,670.13	-1,851.66	768.23	2,004.69	4.46	3.88	2.21
7,402.00	91.51	159.14	5,668.92	-1,880.57	779.35	2,035.66	4.83	-4.68	1.19
7,434.00	91.41	160.13	5,668.11	-1,910.56	790.48	2,067.62	3.11	-0.31	3.09
7,466.00	91.48	160.98	5,667.30	-1,940.72	801.13	2,099.56	2.66	0.22	2.66
7,498.00	92.86	161.10	5,666.09	-1,970.96	811.52	2,131.47	4.33	4.31	0.37
7,530.00	91.95	160.40	5,664.75	-2,001.15	822.06	2,163.39	3.59	-2.84	-2.19
7,551.00	90.61	159.40	5,664.28	-2,020.86	829.28	2,184.36	7.96	-6.38	-4.76
7,583.00	90.10	159.87	5,664.08	-2,050.86	840.41	2,216.33	2.17	-1.59	1.47
7,614.00	90.57	159.94	5,663.90	-2,079.97	851.06	2,247.30	1.53	1.52	0.23
7,646.00	91.45	159.86	5,663.33	-2,110.02	862.06	2,279.27	2.76	2.75	-0.25
7,678.00	89.56	160.18	5,663.05	-2,140.09	872.99	2,311.23	5.99	-5.91	1.00
7,710.00	89.40	160.05	5,663.34	-2,170.18	883.88	2,343.19	0.64	-0.50	-0.41
7,742.00	89.87	159.98	5,663.55	-2,200.25	894.81	2,375.15	1.48	1.47	-0.22
7,774.00	89.73	159.88	5,663.66	-2,230.31	905.80	2,407.12	0.54	-0.44	-0.31
7,806.00	89.70	159.83	5,663.82	-2,260.35	916.82	2,439.09	0.18	-0.09	-0.16
7,838.00	90.20	159.79	5,663.85	-2,290.38	927.86	2,471.06	1.57	1.56	-0.12
7,870.00	90.37	160.12	5,663.69	-2,320.45	938.83	2,503.03	1.16	0.53	1.03
7,902.00	90.77	160.16	5,663.37	-2,350.54	949.70	2,534.99	1.26	1.25	0.12
7,934.00	92.02	159.67	5,662.59	-2,380.59	960.68	2,566.95	4.20	3.91	-1.53
7,966.00	91.95	159.29	5,661.48	-2,410.54	971.89	2,598.91	1.21	-0.22	-1.19
7,998.00	91.24	159.34	5,660.59	-2,440.46	983.19	2,630.88	2.22	-2.22	0.16
8,030.00	91.21	158.61	5,659.91	-2,470.32	994.67	2,662.86	2.28	-0.09	-2.28
8,062.00	91.01	158.33	5,659.29	-2,500.09	1,006.41	2,694.84	1.08	-0.62	-0.87
8,094.00	91.28	158.06	5,658.65	-2,529.79	1,018.30	2,726.83	1.19	0.84	-0.84
8,126.00	91.44	158.16	5,657.89	-2,559.48	1,030.22	2,758.82	0.59	0.50	0.31
8,158.00	91.61	158.17	5,657.04	-2,589.17	1,042.12	2,790.81	0.53	0.53	0.03
8,190.00	91.98	158.35	5,656.03	-2,618.88	1,053.97	2,822.79	1.29	1.16	0.56
8,222.00	91.92	158.80	5,654.94	-2,648.65	1,065.65	2,854.76	1.42	-0.19	1.41
8,254.00	90.84	158.45	5,654.17	-2,678.44	1,077.31	2,886.74	3.55	-3.37	-1.09
8,286.00	90.91	158.38	5,653.68	-2,708.19	1,089.08	2,918.73	0.31	0.22	-0.22
8,318.00	91.31	158.49	5,653.07	-2,737.95	1,100.84	2,950.72	1.30	1.25	0.34
8,350.00	90.50	158.22	5,652.56	-2,767.69	1,112.64	2,982.71	2.67	-2.53	-0.84
8,382.00	89.63	158.40	5,652.52	-2,797.42	1,124.47	3,014.71	2.78	-2.72	0.56
8,414.00	90.94	158.13	5,652.36	-2,827.14	1,136.32	3,046.70	4.18	4.09	-0.84
8,446.00	90.97	158.24	5,651.83	-2,856.85	1,148.21	3,078.70	0.36	0.09	0.34
8,478.00	91.21	157.98	5,651.22	-2,886.54	1,160.14	3,110.69	1.11	0.75	-0.81
8,509.00	92.28	157.80	5,650.28	-2,915.24	1,171.80	3,141.67	3.50	3.45	-0.58
8,541.00	92.48	157.32	5,648.95	-2,944.79	1,184.00	3,173.64	1.62	0.62	-1.50

Scientific Drilling

Survey Report

Company: Questar Exploration & Production
Project: Uintah County, UT NAD27
Site: WRU GB
Well: WRU GB 14G-4-8-22
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well WRU GB 14G-4-8-22
TVD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
MD Reference: GL 5171' & RKB 16' @ 5187.00ft (Ensign 57)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Multi User DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,573.00	92.82	157.37	5,647.47	-2,974.29	1,196.32	3,205.61	1.07	1.06	0.16
8,605.00	92.35	156.79	5,646.03	-3,003.74	1,208.77	3,237.58	2.33	-1.47	-1.81
8,637.00	90.37	156.62	5,645.27	-3,033.12	1,221.42	3,269.56	6.21	-6.19	-0.53
8,669.00	90.81	156.52	5,644.94	-3,062.48	1,234.14	3,301.56	1.41	1.37	-0.31
8,701.00	90.74	156.72	5,644.50	-3,091.85	1,246.84	3,333.55	0.66	-0.22	0.62
8,732.00	91.17	156.51	5,643.99	-3,120.30	1,259.14	3,364.55	1.54	1.39	-0.68
8,764.00	92.55	157.57	5,642.95	-3,149.75	1,271.62	3,396.53	5.44	4.31	3.31
8,796.00	94.11	159.49	5,641.09	-3,179.47	1,283.31	3,428.46	7.72	4.87	6.00
8,836.00	94.11	159.49	5,638.22	-3,216.84	1,297.29	3,468.33	0.00	0.00	0.00

Projection to TD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
WRU B 14G-4-8-22 PBI	0.00	0.00	5,627.00	-2,998.00	1,250.35	663,877.02	2,575,263.84	40° 8' 16.270 N	109° 26' 32.100 W
- actual wellpath misses target center by 44.56ft at 8616.63ft MD (5645.62 TVD, -3014.41 N, 1213.35 E)									
- Point									

Checked By: _____ Approved By: _____ Date: _____

Deviation Summary

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

TMD: 8,796.0 (ft)

TVD: 5,641.12 (ft)

Spud Date: 8/19/2008

Closure Distance: 3,428.7 (ft)

Closure Direction: 158.02 (°)

Calculation Method: Minimum Curvature

Well Name: WRU GB 14G-4-8-22 TMD: 8,796.0 (ft) TVD: 5,641.12 (ft) Closure Distance: 3,428.7 (ft) Closure Direction: 158.02 (°)										Location: 4- 8-S 22-E 26 Spud Date: 8/19/2008 Calculation Method: Minimum Curvature		S/T #	V.S. AZI (°)
										OH	157.04		
										01	0.00		
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type		
OH	0.0	0.00	0.00	YNN	0.00	0.00	0.00	0.00	0.00	0.00	MSS		
OH	972.0	1.90	142.00	YNN	971.82	-12.70	9.92	15.56	0.20	0.20	MSS		
OH	1,842.0	1.70	174.80	YNN	1,841.41	-36.92	19.97	41.78	0.12	-0.02	MSS		
OH	2,495.0	2.00	188.70	YNN	2,494.08	-57.83	19.12	60.71	0.08	0.05	MSS		
OH	2,955.0	2.50	193.40	YNN	2,953.72	-75.52	15.59	75.62	0.12	0.11	MSS		
OH	3,429.0	3.30	206.43	YNN	3,427.12	-97.79	7.12	92.82	0.22	0.17	MSS		
OH	3,960.0	1.10	212.93	YNN	3,957.69	-115.76	-2.46	105.63	0.42	-0.41	MSS		
OH	4,521.0	1.20	211.13	YNN	4,518.58	-125.31	-8.42	112.10	0.02	0.02	MSS		
OH	5,045.0	1.00	202.83	YNN	5,042.48	-134.22	-13.03	118.50	0.05	-0.04	MSS		
OH	5,223.0	0.72	186.77	YNN	5,220.46	-136.76	-13.77	120.56	0.21	-0.16	MMS		
OH	5,254.0	1.35	172.57	YNN	5,251.46	-137.32	-13.74	121.08	2.18	2.03	MMS		
OH	5,285.0	5.48	158.30	YNN	5,282.40	-139.05	-13.15	122.91	13.50	13.32	MMS		
OH	5,317.0	10.69	157.05	YNN	5,314.07	-143.21	-11.42	127.41	16.29	16.28	MMS		
OH	5,348.0	15.98	156.69	YNN	5,344.22	-149.78	-8.61	134.56	17.07	17.06	MMS		
OH	5,379.0	21.26	154.36	YNN	5,373.59	-158.77	-4.49	144.44	17.20	17.03	MMS		
OH	5,410.0	26.21	152.71	YNN	5,401.96	-169.93	1.09	156.89	16.11	15.97	MMS		
OH	5,441.0	31.67	152.90	YNN	5,429.08	-183.27	7.94	171.85	17.62	17.61	MMS		
OH	5,472.0	35.76	152.82	YNN	5,454.86	-198.58	15.78	189.00	13.19	13.19	MMS		
OH	5,503.0	37.65	152.47	YNN	5,479.71	-215.03	24.30	207.48	6.13	6.10	MMS		
OH	5,534.0	39.39	153.04	YNN	5,503.96	-232.20	33.14	226.73	5.73	5.61	MWD		
OH	5,565.0	42.61	152.90	YNN	5,527.36	-250.31	42.38	247.01	10.39	10.39	MWD		
OH	5,596.0	46.39	153.43	YNN	5,549.46	-269.70	52.18	268.69	12.25	12.19	MWD		
OH	5,627.0	49.97	153.74	YNN	5,570.13	-290.39	62.46	291.74	11.57	11.55	MWD		
OH	5,658.0	53.51	153.52	YNN	5,589.32	-312.19	73.27	316.04	11.43	11.42	MWD		
OH	5,689.0	57.31	152.55	YNN	5,606.92	-334.93	84.84	341.49	12.53	12.26	MWD		
OH	5,720.0	60.83	152.29	YNN	5,622.85	-358.50	97.15	367.99	11.38	11.35	MWD		
OH	5,752.0	64.50	152.65	YNN	5,637.54	-383.70	110.29	396.32	11.51	11.47	MWD		
OH	5,782.0	67.56	149.53	YNN	5,649.73	-407.69	123.54	423.58	13.94	10.20	MWD		
OH	5,813.0	70.43	149.55	YNN	5,660.84	-432.63	138.21	452.27	9.26	9.26	MWD		
OH	5,844.0	73.53	149.55	YNN	5,670.43	-458.04	153.15	481.49	10.00	10.00	MWD		
OH	5,875.0	76.50	150.72	YNN	5,678.44	-484.01	168.06	511.22	10.25	9.58	MWD		
OH	5,906.0	79.62	152.76	YNN	5,684.86	-510.72	182.41	541.41	11.95	10.06	MWD		
OH	5,937.0	82.29	154.14	YNN	5,689.73	-538.10	196.09	571.96	9.67	8.61	MWD		

DY. OF OIL, GAS & MINING

Deviation Summary

Well Name: WRU GB 14G-4-8-22										S/T #	V.S. AZI (°)
TMD: 8,796.0 (ft) TVD: 5,641.12 (ft)										OH	157.04
Closure Distance: 3,428.7 (ft) Closure Direction: 158.02 (°)										01	0.00
Location: 4-8-S 22-E 26										Calculation Method: Minimum Curvature	
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
OH	5,969.0	84.42	156.14	YNN	5,693.43	-566.94	209.45	603.73	9.10	6.66	MWD
OH	5,984.0	86.54	156.97	YNN	5,694.62	-580.65	215.40	618.68	15.17	14.13	MWD
OH	6,049.0	92.05	160.41	YNN	5,695.42	-641.17	239.01	683.61	9.99	8.48	MMS
OH	6,066.0	92.02	156.97	YNN	5,694.81	-657.00	245.18	700.59	20.22	-0.18	MWD
OH	6,098.0	92.39	160.63	YNN	5,693.58	-686.81	256.74	732.55	11.49	1.16	MWD
02	6,131.0	92.39	156.46	NYN	5,692.20	-717.98	267.48	765.62	0.00	0.00	MWD
02	6,163.0	89.90	156.46	YNN	5,691.56	-747.31	280.26	797.60	7.78	-7.78	MWD
02	6,195.0	90.44	155.39	YNN	5,691.47	-776.52	293.31	829.59	3.75	1.69	MWD
02	6,226.0	91.51	155.10	YNN	5,690.94	-804.67	306.29	860.57	3.58	3.45	MWD
02	6,258.0	87.65	155.49	YNN	5,691.17	-833.74	319.66	892.54	12.12	-12.06	MWD
02	6,290.0	86.75	155.10	YNN	5,692.74	-862.77	333.02	924.48	3.06	-2.81	MWD
02	6,321.0	87.38	154.85	YNN	5,694.32	-890.82	346.11	955.41	2.19	2.03	MWD
02	6,353.0	88.36	154.85	YNN	5,695.51	-919.77	359.71	987.36	3.06	3.06	MWD
02	6,385.0	89.80	155.51	YNN	5,696.03	-948.81	373.14	1,019.33	4.95	4.50	MWD
02	6,417.0	92.62	155.40	YNN	5,695.35	-977.91	386.42	1,051.30	8.82	8.81	MWD
02	6,449.0	93.43	155.32	YNN	5,693.66	-1,006.95	399.75	1,083.24	2.54	2.53	MWD
02	6,479.0	91.24	155.94	YNN	5,692.44	-1,034.26	412.11	1,113.20	7.59	-7.30	MWD
02	6,511.0	91.65	155.68	YNN	5,691.63	-1,063.44	425.22	1,145.18	1.52	1.28	MWD
02	6,543.0	91.81	156.04	YNN	5,690.67	-1,092.63	438.30	1,177.15	1.23	0.50	MWD
02	6,575.0	92.59	155.31	YNN	5,689.44	-1,121.76	451.47	1,209.11	3.34	2.44	MWD
02	6,607.0	92.89	155.51	YNN	5,687.91	-1,150.83	464.78	1,241.06	1.13	0.94	MWD
02	6,639.0	91.31	155.82	YNN	5,686.74	-1,179.96	477.95	1,273.02	5.03	-4.94	MWD
02	6,671.0	91.41	155.68	YNN	5,685.98	-1,209.13	491.09	1,305.00	0.54	0.31	MWD
02	6,703.0	91.01	155.45	YNN	5,685.30	-1,238.26	504.33	1,336.98	1.44	-1.25	MWD
02	6,735.0	91.41	155.08	YNN	5,684.63	-1,267.32	517.71	1,368.95	1.70	1.25	MWD
02	6,766.0	91.18	156.14	YNN	5,683.92	-1,295.54	530.51	1,399.93	3.50	-0.74	MWD
02	6,798.0	90.34	155.77	YNN	5,683.50	-1,324.76	543.55	1,431.91	2.87	-2.63	MWD
02	6,830.0	90.37	156.36	YNN	5,683.30	-1,354.01	556.53	1,463.90	1.85	0.09	MWD
02	6,862.0	90.57	156.46	YNN	5,683.04	-1,383.34	569.34	1,495.90	0.70	0.63	MWD
02	6,894.0	90.81	156.58	YNN	5,682.65	-1,412.68	582.08	1,527.89	0.84	0.75	MWD
02	6,926.0	91.01	156.52	YNN	5,682.15	-1,442.04	594.82	1,559.89	0.65	0.63	MWD
02	6,958.0	91.38	156.75	YNN	5,681.48	-1,471.41	607.50	1,591.88	1.36	1.16	MWD
02	6,990.0	92.05	156.47	YNN	5,680.52	-1,500.76	620.20	1,623.86	2.27	2.09	MWD

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Deviation Summary

Well Name: WRU GB 14G-4-8-22

Location: 4-8-S 22-E 26

TMD: 8,796.0 (ft)

TVD: 5,641.12 (ft)

Spud Date: 8/19/2008

Closure Distance: 3,428.7 (ft)

Closure Direction: 158.02 (°)

Calculation Method: Minimum Curvature

S/T #	V.S. AZI (°)
OH	157.04
01	0.00

S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N/-S (ft)	E/-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
02	7,022.0	91.95	156.93	YNN	5,679.40	-1,530.14	632.85	1,655.84	1.47	-0.31	MWD
02	7,053.0	92.19	156.55	YNN	5,678.28	-1,558.60	645.09	1,686.81	1.45	0.77	MWD
02	7,085.0	92.32	156.51	YNN	5,677.02	-1,587.93	657.82	1,718.79	0.43	0.41	MWD
02	7,115.0	90.84	156.73	YNN	5,676.20	-1,615.45	669.72	1,748.77	4.99	-4.93	MWD
02	7,147.0	90.91	156.67	YNN	5,675.71	-1,644.84	682.38	1,780.77	0.29	0.22	MWD
02	7,179.0	91.01	156.71	YNN	5,675.17	-1,674.22	695.04	1,812.76	0.34	0.31	MWD
02	7,211.0	91.04	156.79	YNN	5,674.60	-1,703.62	707.67	1,844.75	0.27	0.09	MMS
02	7,243.0	90.87	157.19	YNN	5,674.07	-1,733.07	720.17	1,876.75	1.36	-0.53	MMS
02	7,275.0	92.25	157.68	YNN	5,673.20	-1,762.61	732.45	1,908.73	4.58	4.31	MMS
02	7,307.0	91.18	157.25	YNN	5,672.24	-1,792.15	744.71	1,940.72	3.60	-3.34	MMS
02	7,338.0	91.68	158.04	YNN	5,671.46	-1,820.81	756.49	1,971.71	3.02	1.61	MMS
02	7,371.0	92.96	158.77	YNN	5,670.13	-1,851.47	768.63	2,004.68	4.46	3.88	MMS
02	7,402.0	91.51	159.14	YNN	5,668.92	-1,880.38	779.75	2,035.64	4.83	-4.68	MMS
02	7,434.0	91.41	160.13	YNN	5,668.10	-1,910.37	790.88	2,067.60	3.11	-0.31	MMS
02	7,466.0	91.48	160.98	YNN	5,667.30	-1,940.53	801.53	2,099.54	2.66	0.22	MMS
02	7,498.0	92.86	161.10	YNN	5,666.09	-1,970.78	811.92	2,131.45	4.33	4.31	MMS
02	7,530.0	91.95	160.40	YNN	5,664.74	-2,000.96	822.46	2,163.37	3.59	-2.84	MMS
02	7,551.0	90.61	159.40	YNN	5,664.27	-2,020.68	829.68	2,184.34	7.96	-6.38	MWD
02	7,583.0	90.10	159.87	YNN	5,664.08	-2,050.67	840.81	2,216.32	2.17	-1.59	MWD
02	7,614.0	90.57	159.94	YNN	5,663.89	-2,079.79	851.47	2,247.28	1.53	1.52	MWD
02	7,646.0	91.45	159.86	YNN	5,663.33	-2,109.83	862.46	2,279.25	2.76	2.75	MWD
02	7,678.0	89.56	160.18	YNN	5,663.05	-2,139.90	873.39	2,311.21	5.99	-5.91	MWD
02	7,710.0	89.40	160.05	YNN	5,663.34	-2,169.99	884.28	2,343.17	0.64	-0.50	MMS
02	7,742.0	89.87	159.98	YNN	5,663.54	-2,200.07	895.21	2,375.14	1.48	1.47	MMS
02	7,774.0	89.73	159.88	YNN	5,663.65	-2,230.12	906.20	2,407.10	0.54	-0.44	MMS
02	7,806.0	89.70	159.83	YNN	5,663.81	-2,260.17	917.22	2,439.07	0.18	-0.09	MMS
02	7,838.0	90.20	159.79	YNN	5,663.84	-2,290.20	928.26	2,471.04	1.57	1.56	MMS
02	7,870.0	90.37	160.12	YNN	5,663.68	-2,320.26	939.23	2,503.01	1.16	0.53	MMS
02	7,902.0	90.70	160.16	YNN	5,663.38	-2,350.36	950.10	2,534.97	1.04	1.03	MMS
02	7,934.0	92.05	159.55	YNN	5,662.62	-2,380.39	961.12	2,566.93	4.63	4.22	MMS
02	7,966.0	91.95	159.29	YNN	5,661.50	-2,410.33	972.36	2,598.89	0.87	-0.31	MMS
02	7,998.0	91.24	159.34	YNN	5,660.61	-2,440.25	983.66	2,630.86	2.22	-2.22	MMS
02	8,030.0	91.21	158.61	YNN	5,659.92	-2,470.12	995.13	2,662.84	2.28	-0.09	MMS

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Deviation Summary

Well Name: WRU GB 14G-4-8-22

Location: 4-8-S 22-E 26

TMD: 8,796.0 (ft)

TVD: 5,641.12 (ft)

Spud Date: 8/19/2008

Closure Distance: 3,428.7 (ft)

Closure Direction: 158.02 (°)

Calculation Method: Minimum Curvature

S/T #

V.S. AZI (°)

OH

157.04

01

0.00

S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
02	8,062.0	91.01	159.33	YNN	5,659.30	-2,499.98	1,006.62	2,694.82	2.33	-0.63	MMS
02	8,094.0	91.28	158.06	YNN	5,658.66	-2,529.79	1,018.24	2,726.81	4.06	0.84	MMS
02	8,126.0	91.44	158.16	YNN	5,657.91	-2,559.47	1,030.17	2,758.79	0.59	0.50	MMS
02	8,158.0	91.61	158.17	YNN	5,657.05	-2,589.16	1,042.06	2,790.78	0.53	0.53	MMS
02	8,190.0	91.98	158.35	YNN	5,656.05	-2,618.87	1,053.91	2,822.76	1.29	1.16	MMS
02	8,222.0	91.92	158.80	YNN	5,654.96	-2,648.64	1,065.59	2,854.73	1.42	-0.19	MMS
02	8,254.0	90.84	158.45	YNN	5,654.19	-2,678.43	1,077.25	2,886.72	3.55	-3.38	MMS
02	8,286.0	90.91	158.38	YNN	5,653.70	-2,708.19	1,089.02	2,918.71	0.31	0.22	MMS
02	8,316.0	91.31	158.49	YNN	5,653.12	-2,736.08	1,100.05	2,948.70	1.38	1.33	MMS
02	8,350.0	90.50	158.22	YNN	5,652.58	-2,767.68	1,112.59	2,982.69	2.51	-2.38	MMS
02	8,382.0	89.63	158.40	YNN	5,652.55	-2,797.41	1,124.41	3,014.68	2.78	-2.72	MMS
02	8,414.0	90.94	158.13	YNN	5,652.39	-2,827.14	1,136.26	3,046.68	4.18	4.09	MMS
02	8,446.0	90.97	158.24	YNN	5,651.86	-2,856.84	1,148.15	3,078.67	0.36	0.09	MMS
02	8,478.0	91.21	157.98	YNN	5,651.25	-2,886.53	1,160.08	3,110.66	1.11	0.75	MMS
02	8,509.0	92.28	157.80	YNN	5,650.30	-2,915.24	1,171.74	3,141.64	3.50	3.45	MMS
02	8,541.0	92.48	157.32	YNN	5,648.97	-2,944.79	1,183.95	3,173.62	1.62	0.63	MMS
02	8,573.0	92.82	157.37	YNN	5,647.49	-2,974.29	1,196.26	3,205.58	1.07	1.06	MMS
02	8,605.0	92.35	156.79	YNN	5,646.05	-3,003.73	1,208.71	3,237.55	2.33	-1.47	MMS
02	8,637.0	90.37	156.62	YNN	5,645.29	-3,033.11	1,221.36	3,269.54	6.21	-6.19	MMS
02	8,669.0	90.81	156.52	YNN	5,644.96	-3,062.47	1,234.09	3,301.53	1.41	1.38	MMS
02	8,701.0	90.74	156.72	YNN	5,644.53	-3,091.84	1,246.78	3,333.53	0.66	-0.22	MMS
02	8,732.0	91.17	156.51	YNN	5,644.01	-3,120.29	1,259.09	3,364.52	1.54	1.39	MMS
02	8,764.0	92.55	157.57	YNN	5,642.97	-3,149.74	1,271.56	3,396.50	5.44	4.31	MMS
02	8,796.0	94.11	159.64	YNN	5,641.12	-3,179.48	1,283.21	3,428.44	8.09	4.88	MMS

QEP - Uinta Basin Inc

New Well & Workover Production Test Report

Well: WRU GB 14G-4-8-22

Date of First Production

14-Nov-08

Bbl of Load to Recover

800

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DIV. OF OIL, GAS & MINING

Date	Tubing psig	Casing psig	Oil BOPD	Gas MCFPD	Water BWPD	Bbl Load to Recov.	Fluid Level, FOP	Remarks
11/14/2008	70	70	113	0	137	663		Start up 4PM on 11/14/08 15 HRS prod.
11/15/2008	60	60	263	0	100	563		24 HR Prod.
11/16/2008	60	60	244	0	125	438		24 HR Prod.
11/17/2008	80	80	299	0	53	385		24 HR Prod.
11/18/2008	60	60	734	0	204	181		24 HR Prod.
11/19/2008	80	80	278	0	37	144		24 HR Prod.
11/20/2008	100	100	364	72	27	117		24 HR Prod.
11/21/2008	50	20	380	136	34	83	1313'	24 HR Prod.
11/22/2008	150	200	417	172	55	28		24 HR Prod.
11/23/2008	50	50	315	181	42	-14		24 HR Prod.
11/24/2008	50	50	247	176	17	-31		24 HR Prod.
11/25/2008	50	50	252	169	25	-56	1019'	23 HR Prod.
11/26/2008	90	90	223	165	23	-79		22 HR Prod.
11/27/2008	60	40	244	165	19	-98		24 HR Prod.
11/28/2008	60	60	192	169	31	-129		24HR pulled water bottoms we lost 37bbls
11/29/2008	50	70	209	172	17	-146		24 HR Prod.
11/30/2008	80	90	208	173	29	-175		24 HR Prod.
12/1/2008	110	110	197	66	21	-196		Gas comp. down Bad starter
12/2/2008	40	60	209	106	30	-226		
12/3/2008	25	50	166	143	28	-254		
12/4/2008	50	60	173	173	13	-267		Oil & Gas prod #s are not a mistake
12/5/2008	50	65	166	146	23	-290	896'	
12/6/2008	50	60	165	147	13	-303		
12/7/2008	50	65	156	153	20	-323		
12/8/2008	75	80	160	164	39	-362	911'	
12/9/2008	45	60	154	154	4	-366		
12/10/2008	60	88	137	134	19	-385		
12/11/2008	70	70	151	138	34	-419		
12/12/2008	50	65	156	158	63	-482		
12/13/2008	80	90	139	82	19	-501		compressor down waiting on parts
12/14/2008	120	70	139	125	40	-541		compressor fixed
12/15/2008	90	65	162	150	48	-589		
12/16/2008	95	55	111	152	19	-608	979'	
12/17/2008	95	85	136	40	32	-640		
12/18/2008	55	55	128	119	34	-674		
12/19/2008	80	65	138	158	25	-699	1137'	
12/20/2008	55	65	110	159	23	-722		
12/21/2008	90	65	135	166	26	-748		
12/22/2008	90	60	112	143	36	-784		
12/23/2008	105	85	120	152	48	-832		
12/24/2008	50	60	125	147	17	-849		
12/25/2008	65	65	114	163	19	-868		
12/26/2008	90	70	116	157	19	-887		
12/27/2008	70	70	122	169	11	-898		
12/28/2008	100	70	108	169	21	-919		
12/29/2008	90	65	118	169	21	-940		
12/30/2008	65	65	101	170	21	-961		
12/31/2008	90	75	106	145	17	-978		
1/1/2009	100	90	110	167	28	-1006		
1/2/2009	105	88	101	3	19	-1025		Compressor down High discharge psi
1/3/2009	105	110	103	125	21	-1046		
1/4/2009	95	80	95	112	18	-1064		
1/5/2009	100	85	105	60	25	-1089		Compressor down carburetor froze off
1/6/2009	95	85	93	152	19	-1108		
1/7/2009						-1108		
1/8/2009						-1108		
1/9/2009						-1108		
1/10/2009						-1108		
1/11/2009						-1108		
1/12/2009						-1108		
1/13/2009						-1108		
1/14/2009						-1108		
1/15/2009						-1108		
1/16/2009						-1108		
1/17/2009						-1108		
1/18/2009						-1108		
1/19/2009						-1108		
1/20/2009						-1108		

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Questar E & P

Operations Summary Report - DRILLING

Well Name: WRU GB 14G-4-8-22

Location: 4-8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
8/21/2008	06:00 - 11:30	5.50	LOC	2	DRILL 40' OF 18" HOLE AND SET 14" CONDUCTOR PIPE. CEMENT WITH READY MIX.
	11:30 - 20:00	8.50	DRL	9	HAMMER DRILL 12 1/4" HOLE FROM 40' TO 520'. BLOW DOWN WELL
	20:00 - 21:00	1.00	TRP	3	LAY DOWN DRILL STRING.
	21:00 - 22:00	1.00	CSG	2	SAFETY MEETING. RUN 12 JOINTS OF 9 5/8", J55, 36#, LT&C PIPE AS FOLLOWS: SHOE AT 499', FLOAT COLLAR AT 454.94'. RAN 3 CENTRALIZERS FROM 489' TO 373' AND ONE AT 84'.
	22:00 - 00:00	2.00	CMT	2	NOTE: ALL MEASUREMENTS ARE FROM GROUND LEVEL SAFETY MEETING. RIG UP AND CEMENT AS FOLLOWS: PUMP 40 BBL OF WATER, 10 BBL OF GEL SPACER. LEAD SLURRY 15.8 PPG, YEALD 1.15, GAL/SK 5, 63.4 BBL, 310 SKS. DISPLACE WITH 35.3 BBL, PLUG BUMPED, FLOATS HELD, 18 BBL OF CEMENT TO SURFACE.
8/31/2008	06:00 - 07:00	1.00	LOC	4	WAIT ON CEMENT
	07:00 - 18:00	11.00	LOC	3	CONTACT BLM MICHAEL LEE ON 8-18-08 AT 15:20 HRS FOR SPUD CONDUCTOR ON 8-19-08 AT 08:00 HRS.
	18:00 - 06:00	12.00	LOC	4	CONTACT UTAH STATE CAROL DANIELS ON 8-18-08 AT 15:25 HRS FOR SPUD ON 8-19-08 AT 08:00.
					CONTACT WONSIT VALLY DAHN CALDWELL AND RED WASH JAN NEILSON WITH SPUD INFORMATION.
					CALLED BLM JAMIE SPARGER ON 8-20-08 AT 07:40 HRS FOR RUNNING CASING AND CEMENTING ON 8-20-08 AT 22:00 HRS.
9/1/2008	06:00 - 21:00	15.00	LOC	4	PRE-PAIR RIG FOR TRUCKS
					MOVE RIG F/ GB 4W 9-8-22 TO THE WRU GB 14G-4-8-22
					RIG UP & PRE-PAIR DERRICK TO BE RAISES THIS AM & MOVE LIVING QUARTERS TO NEW LOCATION
9/2/2008	06:00 - 09:30	3.50	BOP	2	90% RIGGED UP
	09:30 - 10:30	1.00	BOP	1	RAISE DERRICK / MOVE LIVING QUARTERS TO NEW LOCATION / RIG UP FLOOR EQUIPMENT & FINISH RIGGING UP BACK YARD / NOTIFIED JAKE BIRCHELL W/ THE UTAH BLM @ 1500 PM ON 8/31/2008 ON BOP TEST (VOICE MAIL)
	10:30 - 11:30	1.00	BOP	1	NIPPLE UP BOP'S & CHANGE PIPE RAMS F/ 2 7/8" TO 4 1/2"
9/3/2008	11:30 - 15:00	3.50	TRP	1	TEST BOP'S W/ B&C QUICK TEST / LOWER KELLY VALVE, UPPER & LOWER PIPE RAMS, HCR / LEAK ON BOTTOM FLANGE / TIGHTEN BOLTS ON FLANGE
	15:00 - 17:00	2.00	DRL	4	FINISH TESTING BOP'S W/ B&C QUICK TEST 3000 PSI HIGH 10 MIN, 250 PSI LOW FOR 5 MIN / TEST ANNULAR 1500 PSI 10MIN, 250 PSI LOW 5 MIN / TEST 9 5/8 CASING TO 1500 PSI FOR 30 MIN.
	17:00 - 17:30	0.50	DRL	1	WAIT ON 9" WEAR RING
	17:30 - 18:00	0.50	CIRC	1	INSTALL WEAR RING
	18:00 - 18:30	0.50	EQT	2	PICK UP BHA TO DRILL 8 3/4" VERTICAL SECTION
	18:30 - 22:00	3.50	DRL	1	TAG CEMENT @ 435' & DRILL SHOE TRACK TO 499' (FLOAT COLLAR @ 454' & SHOE @ 499') 21' CEMENT & RAT HOLE TO 520'
	22:00 - 22:30	0.50	SUR	1	DRILLING F/ 520' TO 530' (10' OF NEW FORMATION FOR F.I.T)
	22:30 - 00:00	1.50	DRL	1	CIRCULATE SWEEP AROUND
	00:00 - 00:30	0.50	RIG	4	FIT @ 530' W/ 8.4 PPG, 60 PSI SURFACE PRESSURE=10.6 PPG. EQUIVILANT
	00:30 - 05:30	5.00	DRL	1	DRILLING F/ 530' TO 1006'
	05:30 - 06:00	0.50	SUR	1	RUN WIRELINE SURVEY @ 972' W/ 1.9 INC. 142.0 AZI.
	06:00 - 15:00	9.00	DRL	1	DRILLING F/ 1006' TO 1160'
	15:00 - 15:30	0.50	RIG	1	INSTALL ROTATING HEAD / DRIVE BUSHING
	15:30 - 16:00	0.50	SUR	1	DRILLING F/ 1160' TO 1877'
					SURVEY @ 1842'
					DRILLING F/ 1877' TO 2529'
					LUBRICATE RIG / FUNCTION HYDRIL, COM/GREASE SWIVEL, CROWN
					RUN WIRELINE DEVIATION SURVEY 2495' 2 INC. 188.7 AZI.

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JAN 26 2009

Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/3/2008	16:00 - 19:30	3.50	DRL	1	DRILLING F/ 2529' TO 2763'
	19:30 - 22:00	2.50	RIG	2	WORK ON PUMPS
	22:00 - 02:30	4.50	DRL	1	DRILLING F/ 2763' TO 2995'
	02:30 - 03:00	0.50	SUR	1	RUN WIRELINE DEVIATION SURVEY 2955' 2.5 INC. 193.4 AZI.
9/4/2008	03:00 - 06:00	3.00	DRL	1	DRILLING F/ 2995' TO 3151'
	06:00 - 08:00	2.00	DRL	1	DRILLING F/ 3151' TO 3182' (TIGHT HOLE @ 3151')
	08:00 - 11:00	3.00	FISH	6	WORK TIGHT HOLE (TIGHT F/ 3139' TO 3161')
	11:00 - 13:00	2.00	CIRC	2	CIRCULATE HOLE CLEAN / MUD UP W/ 36 VIS & 8.4 PPG / PUMP & SPOT 50 BBL. LCM PILL ON BOTTOM
9/5/2008	13:00 - 17:00	4.00	TRP	2	TRIP OUT OF HOLE CHANGE BIT & CHECK BHA
	17:00 - 20:00	3.00	TRP	2	TRIP IN HOLE & PICK UP DRILLING JARS
	20:00 - 21:30	1.50	REAM	1	REAM F/ 3122' TO 3182'
	21:30 - 06:00	8.50	DRL	1	DRILLING F/ 3182' TO 3402' (LOSSING 884 BBLs. FOR THE LAST 24 HRS.)
	06:00 - 07:30	1.50	DRL	1	DRILLING F/ 3402' TO 3464'
	07:30 - 08:00	0.50	SUR	1	WIRELINE DEVIATION SURVEY DEPTH 3429' INC. 3.3 CORR. AZI 206.43
	08:00 - 13:00	5.00	DRL	1	DRILLING F/ 3464' TO 3619'
	13:00 - 13:30	0.50	RIG	1	RIG SERVICE / FUNCTION UPPER PIPE RAMS
	13:30 - 03:00	13.50	DRL	1	DRILLING F/ 3619' TO 3961'
	03:00 - 03:30	0.50	SUR	1	WIRELINE DEVIATION SURVEY DEPTH 3960' INC. 1.1 CORR. AZI. 212.93
9/6/2008	03:30 - 06:00	2.50	DRL	1	DRILLING F/ 3961' TO 4003'
	06:00 - 12:00	6.00	DRL	1	DRILLING F/ 4003' TO 4210' ROP @ 34'/HR.
	12:00 - 12:30	0.50	RIG	1	RIG SERVICE / LUBRICATE RIG FUNCTION HYDRIL
	12:30 - 21:30	9.00	DRL	1	DRILLING F/ 4210' TO 4521' ROP @ 34'/HR
9/7/2008	21:30 - 22:00	0.50	SUR	1	WIRELINE DEVIATION SURVEY DEPTH 4521' INC. 1.2 CORR. AZI. 211.13
	22:00 - 06:00	8.00	DRL	1	DRILLING F/ 4521' TO 4744' ROP @ 27'/HR.
	06:00 - 12:00	6.00	DRL	1	DRILING F/ 4744' TO 4958' ROP @ 35'/HR.
	12:00 - 12:30	0.50	RIG	1	RIG SERVICE / FUCTION UPPER PIPE RAMS
	12:30 - 15:30	3.00	DRL	1	DRILLING F/ 4956' TO 5049' ROP @ 31'/HR.
	15:30 - 16:00	0.50	SUR	1	WIRELINE DEVIATION SURVEY (MISS RUN)
	16:00 - 17:30	1.50	DRL	1	DRILLING F/ 5049' TO 5080' ROP @ 21'/HR.
	17:30 - 18:00	0.50	SUR	1	WIRELINE DEVIATION SURVEY DEPTH 5045 INC. 1 CORR. AZI. 202.83
	18:00 - 03:00	9.00	DRL	1	DRILLING F/ 5080' TO 5267' ROP @ 21'/HR.
	03:00 - 05:30	2.50	CIRC	1	CIRCULATE 2 HIGH VIS SWEEPS / PUMP & SPOT LCM PILL @ 3200'
9/8/2008	05:30 - 06:00	0.50	SUR	1	DROP SURVEY / SET KELLY BACK
	06:00 - 12:30	6.50	TRP	2	TRIP OUT OF HOLE F/ 5267' TO BHA (TIGHT HOLE @ 3150') LAY DOWN VERTICAL HOLE BHA
	12:30 - 16:00	3.50	DRL	3	PICK UP DIRECTIONAL BHA #1 / SCRIBE MWD, SURFACE TEST MUD MOTOR, MAKE UP BIT #3
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE / FUNCTION PIPERAMS
	16:30 - 18:00	1.50	TRP	2	TRIP IN HOLE W/ HWD P
	18:00 - 19:00	1.00	REAM	1	WASH & REAM TIGHT SPOT 913' TO 955'
	19:00 - 19:30	0.50	RIG	4	INSTALL ROTATING HEAD RUBBER
	19:30 - 22:00	2.50	TRP	2	TRIP IN HOLE TO 5207'
	22:00 - 00:00	2.00	REAM	1	WASH & REAM F/ 5207' TO 5267'
	00:00 - 06:00	6.00	DRL	2	SLIDE F/ 5267' TO 5315'
9/9/2008	06:00 - 13:30	7.50	DRL	2	SLIDE F/ 5315' TO 5390'
	13:30 - 14:00	0.50	RIG	1	RIG SERVICE / FUNCTION HYDRIL
	14:00 - 20:30	6.50	DRL	2	SLIDE F/ 5390' TO 5452'
	20:30 - 22:00	1.50	CIRC	1	CIRCULATE & CONDITION HOLE / MIX, PUMP & SPOT LCM PILL @ 3200'
9/10/2008	22:00 - 03:30	5.50	TRP	2	TRIP OUT OF HOLE F/ 5452' TO BIT # 3
	03:30 - 06:00	2.50	DRL	3	ORIENT DIRECTIONAL TOOLS
	06:00 - 07:00	1.00	TRP	1	MAKE UP & ORIENT DIRECTIONAL TOOLS & SURFACE TEST MUD MOTOR
	07:00 - 08:00	1.00	RIG	1	RIG SERVICE / WORK ON CROWN-O-MATIC

Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/10/2008	08:00 - 18:30	10.50	TRP	2	TRIP IN HOLE & REAM TO 5452' (TIGHT HOLE @ 3000' TO 3270', 4326' TO 4610', 5000' TO 5100', 5320' TO 5452'
	18:30 - 23:30	5.00	DRL	2	SLIDE F/ 5452' TO 5496' ROP OF 9'/HR.
	23:30 - 01:30	2.00	DRL	1	ROTATING F/ 5496' TO 5526' ROP OF 15'/HR.
	01:30 - 06:00	4.50	DRL	2	SLIDE F/ 5526' TO 5545' 4'/HR.
9/11/2008	06:00 - 15:00	9.00	DRL	2	SLIDE F/ 5545' TO 5607' = ROP 6.8 FPH
	15:00 - 15:30	0.50	RIG	1	RIG SERVICE, GREASE CROWN BLOCKS, SWIVEL, FUNCTION HYDRILL
	15:30 - 18:30	3.00	DRL	2	SLIDE F/ 5607' TO 5638' = ROP 10.3 FPH
	18:30 - 19:00	0.50	DRL	2	ROTATE F/ 5638' TO 5642' = 8 FPH
	19:00 - 06:00	11.00	DRL	2	SLIDE F/ 5642' TO 5700' = 5.2 FPH
9/12/2008	06:00 - 14:00	8.00	DRL	2	DIRECTIONAL DRLG F/ 5700' TO 5762', ROP 7.75' FPH
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE, GREASE CROWN BLOCKS, SWIVEL, FUNCTION TEST HYDRILL
	14:30 - 23:30	9.00	DRL	2	DIRECTIONAL DRLG F/ 5762' TO 5823' , ROP 6.7 FPH
	23:30 - 01:00	1.50	CIRC	1	PUMP SWEEP CIRC. BTMS UP, PUMP PILL
	01:00 - 06:00	5.00	TRP	10	TRIP OUT OF HOLE FOR BIT
9/13/2008	06:00 - 07:00	1.00	TRP	1	L/D MOTOR, MWD, & BIT
	07:00 - 09:30	2.50	TRP	1	P/U MOTOR, ADJUST MOTOR, P/U MWD, TEST MOTOR, INSTALL BIT #5
	09:30 - 11:00	1.50	TRP	2	TRIP IN HOLE TO 1776'
	11:00 - 11:30	0.50	REAM	1	REAM F/ 1776' TO 1807' (CIRC SOME GRAVEL UP)
	11:30 - 13:00	1.50	TRP	2	TRIP IN HOLE TO 5141'
	13:00 - 13:30	0.50	REAM	1	REAM F/ 5141' TO 5186'
	13:30 - 14:00	0.50	OTH		CHANGE OUT SAVER SUB
	14:00 - 21:00	7.00	REAM	1	REAM F/ 5486' TO 5823' (10' FILL)
	21:00 - 06:00	9.00	DRL	2	DIRECTIONAL DRILL F/ 5823' TO 5898' ROP=8.3 FPH
9/14/2008	06:00 - 14:30	8.50	DRL	2	DIRECTIONAL DRILL F/ 5898' TO 5949' (SLIDE 5898'-5918', ROT 5918'-5928', SLIDE 5928'-5949') (ROP=6 FPH)
	14:30 - 15:00	0.50	RIG	2	GREASE BLOCKS, SWIVEL, FUNCTION HYDRILL
	15:00 - 23:30	8.50	DRL	2	DIRECTIONAL DRILL F/ 5949' TO 6027' (ROT 5649'-5964', SLIDE 5964'-5970') (ROP= 9.1 FPH)
	23:30 - 00:30	1.00	CIRC	1	CIRC. BTMS UP, PUMP DRY PILL
	00:30 - 04:00	3.50	TRP	15	TRIP OUT OF HOLE
	04:00 - 06:00	2.00	TRP	1	L/D MUD, FLEX NMDC, GAP SUB, EMHO SUB, NMDC, MOTOR AND BIT
9/15/2008	06:00 - 10:00	4.00	TRP	2	TRIP IN HOLE TO 5450'
	10:00 - 11:00	1.00	REAM	1	WASH AND REAM F/ 5450' TO 5825'
	11:00 - 11:30	0.50	TRP	2	TRIP OUT HOLE TO 5518'
	11:30 - 14:00	2.50	REAM	1	WASH AND REAM F/ 5518' TO 6027'
	14:00 - 15:30	1.50	CIRC	1	PUMP SWEEP, CIRC. BTMS UP
	15:30 - 16:00	0.50	TRP	14	SHORT TRIP 10 STANDS
	16:00 - 18:00	2.00	TRP	2	LAYING DOWN SINGLES (PUMPING OUT OF HOLE)
	18:00 - 19:00	1.00	TRP	2	TRIP IN HOLE TO 5455'
	19:00 - 20:00	1.00	CIRC	1	MIX AND DISPLACE 45 BBL. 12 PPG PILL IN OPEN HOLE
	20:00 - 21:00	1.00	TRP	2	TRIP IN HOLE TO 5657'
	21:00 - 22:00	1.00	CIRC	1	MIX DISPLACEMENT PILL - 45BBL 12PPG IN PIPE
	22:00 - 23:30	1.50	REAM	1	REAMING 5672'-5735', HAD TO WASH TO GET DOWN, LOST TOTAL RETURNS
	23:30 - 00:00	0.50	TRP	14	TRIP TO BOTTOM 6027'
	00:00 - 02:00	2.00	CIRC	1	COND AND CIRC, LOST TOTAL RETURNS, PUMP LCM SWEEP, REGAINED RETURNS
	02:00 - 04:00	2.00	CIRC	6	BUILD VOLUME AND WORK PIPE
	04:00 - 06:00	2.00	TRP	14	KELLEY BACK AND PULL 10 STANDS
9/16/2008	06:00 - 09:00	3.00	REAM	1	SHORT TRIP 10 STANDS
	09:00 - 11:30	2.50	CIRC	1	CIRC. BTMS UP, (SAFETY MEETING W/ LAYDOWN CREW)
	11:30 - 12:30	1.00	TRP	2	TRIP OUT OF THE HOLE 8 STANDS (TIGHT SPOT FROM 5740' TO 5770')
	12:30 - 15:30	3.00	TRP	3	LAY DOWN 4.5" DRILL PIPE

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/16/2008	15:30 - 16:00	0.50	TRP	2	TRIP IN 8 STANDS
	16:00 - 17:30	1.50	OTH		BREAK KELLY, PULL ROTATINGHEAD RUBBER
	17:30 - 19:00	1.50	TRP	3	LAY DOWN 4.5" DRILL PIPE AND 4.5" HWDP
	19:00 - 19:30	0.50	BOP	1	PULL WEAR BUSHING
	19:30 - 21:00	1.50	CSG	1	RIG UP CASING CREW , HELD SAFETY MEETING
	21:00 - 04:30	7.50	CSG	2	RUN 7" 26# HCP-110 CASING TO 6020'
	04:30 - 05:00	0.50	CSG	1	RU 7" CIRC SWEDGE AND WORK PIPE RIG DOWN CASING CREW
	05:00 - 06:00	1.00	CIRC	1	CIRC AND CONDITION FOR CEMENT WHILE WORKING PIPE, GOT CSG TO 6023', RU HES CEMENTERS
9/17/2008	06:00 - 06:30	0.50	RIG	7	HELD SAFETY MEETING W/ CEMENTERS
	06:30 - 08:00	1.50	CMT	1	RIG UP HALLIBURTON TO CEMENT 7" CASING
	08:00 - 14:30	6.50	CIRC	1	WORK 7" CASING AND CIRC. (WAIT ON ANOTHER PUMP TRUCK)
	14:30 - 15:00	0.50	RIG	7	HELD ANOTHER SAFETY MEETING W/ CEMENTERS
	15:00 - 18:30	3.50	CMT	2	CEMENT W/ HALLIBURTON,, 30 BBL SUPERFLUSH, 20 BBL H2O,, HALLIBURTON HI-FILL 40 SACKS 28 BBL H2O @ 10.5 PPG,, HI-FILL LEAD CEMENT 300 SACKS 368 BBL H2O @ 11.0 PPG,,TAIL CEMENT 315 SACKS ,PREMIUM-CLASS G REG.38 BBL H2O @ 15.8 PPG
	18:30 - 19:00	0.50	CMT	1	RIG DOWN CEMENTERS
	19:00 - 21:00	2.00	BOP	1	NIPPLE DOWN BOP TO SET 7" CASING SLIPS
	21:00 - 23:00	2.00	CSG	7	SET 7" CASING SLIPS @ 150K, CUT OFF CASING AND DRESS TOP OF CUT OFF.
	23:00 - 02:30	3.50	BOP	1	NIPPLE UP BOP AND CHANGE PIPE RAMS F/ 4.5" TO 3.5"
	02:30 - 06:00	3.50	BOP	1	LAYDOWN 4.5" KELLY,PICKUP 3.5" 54' KELLY, (54" KELLY IS TO LONG) PICK UP SHORTER 3.5" KELLY AND READY FOR TEST, UPPER AND LOWER SAFETY VALVES, SAVER SUB
9/18/2008	06:00 - 09:00	3.00	BOP	2	TEST PIPE RAMS, 250/5000 PSI, UPPER AND LOWER KELLY VALVES 250/5000 PSI, CASING TO 1500PSI F/ 30 MIN.
	09:00 - 09:30	0.50	BOP	1	SET 7" WEAR BUSHING
	09:30 - 10:30	1.00	OTH		INSTALL KELLY DRIVE BUSHINGS
	10:30 - 13:30	3.00	DRL	3	PICKUP MWD, MOTOR, ORIENT MWD,SURFACE TEST MOTOR,MAKE UP BIT
	13:30 - 15:00	1.50	CSG	1	RIG UP PICKUP MACH. AND GET FLOOR READY TO PICKUP 3.5" STRING
	15:00 - 00:00	9.00	TRP	2	PICKUP 3.5" STRING TO FINISH DRILLING THE G-1 LIME
	00:00 - 01:00	1.00	CSG	1	RIG DOWN PICKUP MACH.
	01:00 - 02:00	1.00	DRL	1	DRILL CEMENT STRINGERS F/ 5875 TO 5913
	02:00 - 03:30	1.50	OTH		RIGUP KELLY SPINNERS, INSTALL ROTATING HEAD RUBBER & CENTER STACK
	03:30 - 04:00	0.50	DRL	1	DRILL CEMENT STRINGERS F/ 5913' TO 5977'
9/19/2008	04:00 - 06:00	2.00	DRL	1	DRILL SHOE TRACK F/5977' TO 6023'
	06:00 - 06:30	0.50	DRL	1	DRILL F/ 6023' TO 6035'
	06:30 - 07:00	0.50	EQT	2	PREFORM F.I.T (326 PSI ,,10.0 PPG EQUIVALANT MUD WT) HELD BOP DRILL
	07:00 - 10:30	3.50	DRL	2	ROTARY DRILL F/ 6035' TO 6102' , ROP= 19.1 FPH
	10:30 - 12:30	2.00	DRL	2	SLIDE DRILL F/ 6102' TO 6112',,ROP=5 FPH
	12:30 - 18:00	5.50	DRL	2	ROTARY DRILL F/ 6112' TO 6202' , ROP= 16.3 FPH
	18:00 - 19:00	1.00	DRL	2	SLIDE DRILL F/ 6202' TO 6208, ROP= 6 FPH
	19:00 - 19:30	0.50	DRL	2	ROTARY DRILL F/ 6208' TO 6234', ROP = 52 FPH
	19:30 - 20:00	0.50	RIG	2	RIG SERVICE, GREASE CROWN,BOCKS,SWIVEL,FUNCTION HYDRIL, (HELD BOP DRILL)
	20:00 - 21:00	1.00	DRL	2	ROTARY DRILL F/ 6234' TO 6250',, ROP = 16 FPH
9/20/2008	21:00 - 22:00	1.00	DRL	2	SLIDE DRILL F/ 6250' TO 6261',,ROP = 11 FPH
	22:00 - 23:30	1.50	DRL	2	ROTARY DRILL F/ 6261' TO 6298',,ROP = 24.6 FPH
	23:30 - 01:00	1.50	DRL	2	SLIDE DRILL F/ 6298' TO 6312' ,, ROP = 9.3 FPH
	01:00 - 06:00	5.00	DRL	2	ROTARY DRILL F/ 6312' TO 6425' ,, ROP = 22.6 FPH
	06:00 - 07:00	1.00	DRL	2	ROTARY DRILL F/ 6425' TO 6454' ,,ROP = 29 FPH

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/20/2008	07:00 - 09:30	2.50	DRL	2	SLIDE DRILL F/ 6454' TO 6465' ,, ROP = 4.4 FPH
	09:30 - 10:30	1.00	DRL	2	ROTARY DRILL F/ 6465' TO 6489' ,, ROP = 24' FPH
	10:30 - 13:00	2.50	DRL	2	SLIDE DRILL F/ 6489' TO 6507' ,,ROP= 7.2 FPH
	13:00 - 14:00	1.00	DRL	2	ROTARY DRILL F/ 6507' TO 6521' ,, ROP = 14 FPH
	14:00 - 14:30	0.50	DRL	2	RIG SERVICE, GREASE BLOCKS, SWIVEL, FUNCTION HYDRIL
	14:30 - 15:00	0.50	CIRC	5	CIRC. UP SAMPLE @ 6510'
	15:00 - 15:30	0.50	DRL	2	ROTARY DRILL F/ 6521' TO 6536' ,,ROP= 30 FPH
	15:30 - 18:00	2.50	WOT	2	CIRC. AND WAIT ON ORDERS
	18:00 - 19:00	1.00	CIRC	1	CIRC. BUILD DRY PILL, FILL TRIP TANK, PUMP DRY PILL
	19:00 - 23:00	4.00	TRP	2	TRIP OUT OF HOLE, TO CHANGE BIT AND MWD & RUN BOND LOG
	23:00 - 00:00	1.00	TRP	1	LAY DOWN MWD, BIT
	00:00 - 03:00	3.00	LOG	2	SAFETY MEETING W/ LOGGERS, R/U LOGGERS AND RUN BOND LOG (CEMENT TOP @ 2420')
	03:00 - 04:30	1.50	TRP	1	SWAP OUT MUD MOTORS,PICKUP MWD & SCRIBE, SURFACE TEST MUD MOTOR,M/U BIT #7
9/21/2008	04:30 - 06:00	1.50	TRP	2	TRIP IN HOLE W/ BIT # 7,
	06:00 - 06:30	0.50	TRP	2	FUNCTION CROWN-O-MATIC AND TRIP IN HOLE
	06:30 - 07:00	0.50	OTH		INSTALL ROTATING HEAD RUBBER& CORROSION RINGS, FILL PIPE
	07:00 - 07:30	0.50	TRP	2	TRIP IN HOLE TO 5800'
	07:30 - 09:00	1.50	RIG	6	SLIP AND CUT DRILLING LINE (150')
	09:00 - 09:30	0.50	TRP	2	RESET CROWN-O-MATIC AND TRIP IN HOLE
	09:30 - 13:00	3.50	OTH		RELOG HOLE W/ GAMMA F/ 6127' TO 6327'
	13:00 - 13:30	0.50	TRP	2	PULL 3 STANDS
	13:30 - 15:30	2.00	DRL	7	TROUGH HOLE F/ SIDE TRACK @ 6141'
	15:30 - 00:00	8.50	DRL	2	TIME DRILLING F/ 6170' TO 6176 @ ONE MIN A FOOT
9/22/2008	00:00 - 06:00	6.00	DRL	3	TIME DRILLING F/6176' TO 6185' @ 2 MIN A FOOT
	06:00 - 11:00	5.00	DRL	2	TIME DRILL F/ 6185' TO 6195' 2 FPH
	11:00 - 11:30	0.50	DRL	2	SLIDE DRILL F/ 6195' TO 6202,,ROP= 14 FPH
	11:30 - 13:00	1.50	CIRC	5	CIRC. UP SAMPLE @ 6202
	13:00 - 14:00	1.00	DRL	2	ROTATE DRILL F/ 6202' TO 6218' ,,ROP = 16 FPH
	14:00 - 17:00	3.00	DRL	2	HAND DRILL ATTEMPT TO GET BACK IN SIDETRACK #1 @ 1' EVERY 2 MIN.
	17:00 - 18:00	1.00	TRP	2	LAY DOWN 4 JT. DRILL PIPE
	18:00 - 18:30	0.50	DRL	3	BUILD TROUGH F/ SIDETRACK F? 6128' TO 6140'
	18:30 - 21:30	3.00	DRL	2	TIME DRILL F/ 6140' TO 6141' @ 5 MIN. A FOOT
	21:30 - 22:30	1.00	DRL	3	LAY DOWN 1 JT. D.P. AND REBUILD TROUGH F/ 6110' TO 6140'
	22:30 - 00:00	1.50	DRL	2	TIME DRILL F/ 6140' TO 6141' (STACKED ON 20k PICKUP 10 FT. AND RESTART)
	00:00 - 01:00	1.00	DRL	2	TIME DRILL F/ 6141 TO 6141.8 (WT STACKING ON BIT)
	01:00 - 01:30	0.50	TRP	2	LAY DOWN 5 JTS. D.P.
	01:30 - 03:00	1.50	REAM	1	REAM HOLE F/ 5964' TO 6110' (REAM EACH JT. TWICE)
9/23/2008	03:00 - 06:00	3.00	DRL	2	TIME DRILL F/ 6140-41'
	06:00 - 07:00	1.00	CIRC	1	CIRC., FILL TRIP TANK, BUILD DRY PILL, AND PUMP DRY PILL
	07:00 - 12:00	5.00	TRP	2	FUNCTION CROWN-O-MATIC, TRIP OUT OF HOLE
	12:00 - 13:30	1.50	TRP	1	CHANGE OUT MOTOR ,BIT, ORIENT MWD, SURFACE TEST MOTOR, P/U SHOCK SUB
	13:30 - 14:00	0.50	RIG	1	RIG SERVICE, FUNCTION PIPE RAMS
	14:00 - 17:00	3.00	TRP	2	TRIP IN HOLE 15 STANDS, PICK UP AGATATOR & SHOCK SUB
	17:00 - 18:00	1.00	OTH		INSTALL ROTATINGHEAD RUBBER
	18:00 - 19:30	1.50	TRP	2	FINISH TRIP IN HOLE
	19:30 - 20:30	1.00	DRL	3	ORIENTATE TOOLFACE IN TROUGH
	20:30 - 06:00	9.50	DRL	2	TIME DRILL F/6141 TO 6147,,TIME DRILL @ 1 FPH
9/24/2008	06:00 - 08:30	2.50	DRL	2	TIME DRILL F/ 6148' TO 6149' @ 1 FOOT PER HR.
	08:30 - 11:00	2.50	DRL	2	TIME DRILL F/ 6149' TO 6155' @ 2 FOOT PER HR.

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/24/2008	11:00 - 15:00	4.00	DRL	2	TIME DRILL F/ 6155' TO 6163' @ 3 FOOT PER. HR.
	15:00 - 21:00	6.00	DRL	2	SLIDE DRILL F/ 6163' TO 6195' „ROP = 5.3 FEET PER HR.
	21:00 - 21:30	0.50	DRL	2	ROTATE DRILL F/ 6195' TO 6203' „ROP = 16 FEET PER HR.
	21:30 - 22:00	0.50	RIG	1	RIG SERVICE, GREASE BLOCKS, SWIVEL FUNCTION PIPE RAMS
	22:00 - 23:30	1.50	DRL	2	SLIDE DRILL F/ 6203' TO 6218 „ROP = 10 FEET PER HR.
	23:30 - 00:30	1.00	DRL	2	ROTARY DRILL F/ 6218' TO 6235' „ROP = 17 FEET PER HR.
	00:30 - 03:30	3.00	DRL	2	SLIDE DRILL F/ 6235' TO 6266' „ROP = 10.3 FEET PER HR.
9/25/2008	03:30 - 06:00	2.50			ROTARY DRILL F/ 6266' TO 6298' „ROP = 12.8 FEET PER. HR.
	06:00 - 07:00	1.00	DRL	2	ROTARY DRILL F/ 6298' TO 6318' „ROP = 20 FEET PER HR.
	07:00 - 09:00	2.00	DRL	2	SLIDE DRILL F/ 6318' TO 6345' „ROP = 13.5 FEET PER HR.
	09:00 - 10:30	1.50	DRL	2	ROTARY DRILL F/ 6345' TO 6377' „ROP = 21.3 FEET PER HR.
	10:30 - 13:30	3.00	DRL	2	SLIDE DRILL F/ 6377' TO 6393' „ROP = 5.3 FEET PER HR.
	13:30 - 14:00	0.50	RIG	1	RIG SERVICE, GREASE BLOCKS SWIVEL, FUNCTION PIPE RAMS
	14:00 - 17:00	3.00	DRL	2	SLIDE DRILL F/ 6393' TO 6425' „ROP = 10.6 FEET PER HR.
	17:00 - 19:00	2.00	DRL	2	ROTARY DRILL F/ 6425' TO 6457' „ROP = 16 FEET PER HR.
	19:00 - 20:00	1.00	DRL	2	SLIDE DRILL F/ 6457' TO 6472' „ROP = 15 FEET PER HR.
	20:00 - 02:00	6.00	DRL	2	ROTARY DRILL F/ 6472' TO 6615' „ROP = 23.8 FEET PER HR.
	02:00 - 03:00	1.00	DRL	2	SLIDE DRILL F/ 6615' TO 6630' „ROP=15 FEET PER HR.
	03:00 - 04:30	1.50	DRL	2	ROTARY DRILL F/ 6630' TO 6679' „ROP = 32.6 FEET PER HR.
	04:30 - 06:00	1.50	DRL	2	SLIDE DRILL F/ 6679' TO 6686' „ROP = 3.5 FEET PER HR.
	06:00 - 10:30	4.50	DRL	2	ROTARY DRILL F/ 6686' TO 6775' „ROP = 19.7 FEET PER HR.
9/26/2008	10:30 - 11:30	1.00	DRL	2	SLIDE DRILL F/ 6775' TO 6781' „ROP = 6 FEET PER HR.
	11:30 - 13:00	1.50	DRL	2	ROTARY DRILL F/ 6781' TO 6806' „ROP = 16.6 FEET PER HR.
	13:00 - 13:30	0.50	RIG	1	RIG SERVICE, GREASE BLOCKS, SWIVEL AND FUNCTION PIPE RAMS
	13:30 - 01:00	11.50	DRL	2	ROTARY DRILL F/ 6806' TO 7108' „ROP = 26.2 FEET PER HOUR
	01:00 - 02:00	1.00	DRL	2	SLIDE DRILL F/ 7108' TO 7115' „ROP = 7 FEET PER HR.
9/27/2008	02:00 - 06:00	4.00	DRL	2	ROTARY DRILL F/ 7115' TO 7230' „ROP = 28.7 FEET PER HR.
	06:00 - 09:00	3.00	DRL	2	DRILLING F/ 7230' TO 7315', ROP @ 28'/HR.
	09:00 - 10:00	1.00	TRP	14	SHORT TRIP F/ 7315' TO 6751' 6 STDs.
	10:00 - 10:30	0.50	DRL	2	SLIDE F/ 7315' TO 7322', ROP @ 14'/HR.
	10:30 - 12:30	2.00	DRL	1	DRILLING F/ 7322' TO 7379', ROP @ 28.5'/HR.
	12:30 - 13:00	0.50	RIG	1	RIG SERVICE / FUNCTION ANNULAR
	13:00 - 13:30	0.50	DRL	2	SLIDE F/ 7379' TO 7388', ROP @ 18'/HR.
	13:30 - 15:00	1.50	DRL	1	DRILLING F/ 7388' TO 7431', ROP @ 17'/HR.
	15:00 - 16:00	1.00	DRL	2	SLIDE F/ 7431' TO 7442', ROP @ 11'/HR.
	16:00 - 20:30	4.50	DRL	1	DRILLING F/ 7442' TO 7538', ROP@ 21.3' /HR
	20:30 - 21:30	1.00	DRL	2	SLIDE F/ 7538' TO 7553', ROP@15' / HR
	21:30 - 23:00	1.50	DRL	2	DRILLING F/ 7553' TO 7591', ROP@ 25.3' /HR
	23:00 - 00:00	1.00	CIRC	1	FILL TRIP TANK, BUILD AND PUMP DRY SLUG
	00:00 - 06:00	6.00	TRP	2	TRIP OUT HOLE, LAY DOWN 2 JTS. „L/D AGITATOR AND SHOCK SUB
9/28/2008	06:00 - 07:30	1.50	TRP	1	PICK UP ORIENT MWD & SURFACE TEST MUD MOTOR
	07:30 - 09:30	2.00	EQT	2	INJECTION TEST / 20 BBLs. TOTAL, PRESSURED UP TO 700 PSI W/ 3 BBLs. IN, DROPE TO 400 PSI W/ 13 BBLs. IN, DROPE TO 350 PSI W/ 18 BBLs. IN, HELD 400 PSI WHEN PUMP SHUT OFF W/ A TOTAL OF 20 BBLs. PUMPED. PUMP RATE THROUGH JOB WAS 3 BBLs./MIN
	09:30 - 10:00	0.50	RIG	1	RIG SERVICE / FUNCTION TEST PIPE RAMS
	10:00 - 10:30	0.50	TRP	2	TRIP IN HOLE F/ SURFACE TO 1500'
	10:30 - 13:30	3.00	OTH		WAIT ON SHOCK SUB & AGITATOR / FIRST CALL WAS MADE @ 5:30 AM TO NOV IN VERNAL. IT WAS SAID TO BE A ETA OF 1.5 HRS. / SOS TRUCKING WAS THE TRUCKING COMPANY
	13:30 - 14:00	0.50	TRP	2	MAKE UP AGITATOR & SHOCK SUB / SURFACE TEST
	14:00 - 16:30	2.50	TRP	2	TRIP IN HOLE F/ 1500' TO 6205'
	16:30 - 19:30	3.00	REAM	1	OREINT & WORK THROUGH SIDE TRACK

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/28/2008	19:30 - 20:30	1.00	TRP	2	TRIP IN HOLE F/ 6205' TO 7510'
	20:30 - 22:00	1.50	REAM	1	SAFETY REAM F/ 7510' TO 7591'
	22:00 - 01:00	3.00	DRL	2	ROTARY DRILL F/ 7591' TO 7654' ,ROP=21,FPH
	01:00 - 02:30	1.50	DRL	2	SLIDE DRILL F/ 7655' TO 7666' ,ROP=7.3 FPH
	02:30 - 06:00	3.50	DRL	2	ROTARY DRILL F/ 7666' TO 7750' ,ROP =24 FPH
9/29/2008	06:00 - 13:30	7.50	DRL	1	DRILLING F/ 7750' TO 7910' ,ROP @ 21'/HR.
	13:30 - 14:00	0.50	RIG	1	RIG SERVICE / FUNCTION PIPE RAMS (LOWER)
	14:00 - 14:30	0.50	DRL	2	SLIDE F/ 7910' TO 7915'
	14:30 - 17:30	3.00	DRL	1	DRILLING F/ 7915' TO 7986' ,ROP @ 23'/HR.
	17:30 - 18:00	0.50	DRL	1	SLIDE F/ 7974' TO 7977' ,ROP@ 6 FPH
9/30/2008	18:00 - 04:30	10.50	DRL	2	DRILLING F/ 7977' TO 8230' ,ROP @ 24 FPH
	04:30 - 06:00	1.50	DRL	2	SLIDE F/ 8230' TO 8250' ,ROP@20 FPH
	06:00 - 12:30	6.50	DRL	1	DRILLING F/ 8250' TO 8358' ,ROP @ 17'/HR
	12:30 - 13:00	0.50	RIG	1	RIG SERVICE
	13:00 - 13:30	0.50	DRL	2	SLIDE F/ 8358' TO 8364' ROP @ 12'/HR
10/1/2008	13:30 - 15:30	2.00	DRL	1	DRILLING F/ 8364' TO 8390' ,ROP @ 13'/HR.
	15:30 - 16:30	1.00	TRP	14	SHORT TRIP F/ 8390' TO 7870'
	16:30 - 18:30	2.00	DRL	1	DRILLING F/ 8390' TO 8406' ROP@ 8 FPH
	18:30 - 19:00	0.50	DRL	2	SLIDE F/ 8406' TO 8415' ROP @ 18FPH
	19:00 - 20:00	1.00	DRL	2	DRILLING F/ 8415' TO 8427' ROP @ 12 FPH
10/2/2008	20:00 - 20:30	0.50	DRL	2	SLIDE F/ 8427' TO 8432' ROP@ 10 FPH
	20:30 - 00:00	3.50	DRL	2	DRILLING F/ 8432' TO 8496' ROP @ 18.2 FPH
	00:00 - 01:00	1.00	DRL	2	SLIDE F/ 8496' TO 8506' ROP @ 10 FPH
	01:00 - 06:00	5.00	DRL	2	DRILLING F/ 8506' TO 8613' ROP @ 21.4 FPH
	06:00 - 06:30	0.50	DRL	2	SLIDE F/ 8613' TO 8625' ,ROP @ 24'HR.
10/3/2008	06:30 - 11:00	4.50	DRL	1	DRILLING F/ 8625' TO 8709' ,ROP @ 19'/HR.
	11:00 - 12:00	1.00	DRL	2	SLIDE F/ 8709' TO 8717' ,ROP @ 8'/HR.
	12:00 - 14:30	2.50	DRL	1	DRILLING F/ 8717' TO 8772' ,ROP @ 22'/HR.
	14:30 - 15:00	0.50	RIG	1	RIG SERVICE / FUNCTION HYDRIL
	15:00 - 16:00	1.00	DRL	2	SLIDE F/ 8772' TO 8782' ,ROP @ 10'/HR.
10/2/2008	16:00 - 18:30	2.50	DRL	1	DRILLING F/ 8782' TO 8836' / TD WELL
	18:30 - 19:30	1.00	CIRC	1	CIRCULATE BOTTOMS UP FOR SAMPLE / MIX & PUMP DRY JOB
	19:30 - 21:30	2.00	TRP	14	SHORT TRIP OUT OF HOLE F/ 8836' TO 6000' / UP IN SHOE
	21:30 - 01:00	3.50	TRP	14	TRIP IN THE HOLE F/ 6000' TO 8500'
	01:00 - 06:00	5.00	REAM	1	WASH & REAM TIGHT SPOTS @ 7600' TO 7700' & 8500' TO 8836'
10/2/2008	06:00 - 09:00	3.00	REAM	1	REAMMING F/ 8600' TO 8836'
	09:00 - 10:30	1.50	CIRC	1	CIRCULATE BOTTOMS UP & MIX, PUMP DRY JOB
	10:30 - 13:00	2.50	TRP	2	SHORT TRIP F/ 8836' TO 7600
	13:00 - 14:30	1.50	CIRC	1	CIRCULATE BOTTOMS UP & MIX, PUMP DRY JOB
	14:30 - 23:30	9.00	TRP	2	TRIP OUT F/ 8836' TO BIT / LAY DOWN DIRECTIONAL BHA / SLM ON WAY OUT
10/3/2008	23:30 - 01:30	2.00	CSG	1	HOLD SAFETY MEETING W/ WEATHERFORD CASING CREW & RIG UP CASING EQUIPMENT
	01:30 - 04:00	2.50	CSG	2	RUN 2734' OF 4 1/2" 11.6# P-110 LT&C PRODUCTION CASING
	04:00 - 06:00	2.00	CSG	1	PICK UP SETTING ADAPTER & RIG DOWN CASING CREW
	06:00 - 09:30	3.50	CSG	2	RUN & SET LINER W/ SHOE DEPTH OF 8707' , 129' OFF BOTTOM / TOP OF LINER 5973'
	09:30 - 10:30	1.00	TRP	3	HOLD SAFETY MEETING W/ WEATHERFORD LAY DOWN CREW & RIG UP EQUIPMENT
10/3/2008	10:30 - 14:30	4.00	TRP	3	TRIP OUT OF HOLE LAYING DOWN F/ 5973' TO 2307'
	14:30 - 15:00	0.50	SEQ	1	BREAK DOWN KELLY
	15:00 - 17:30	2.50	TRP	1	TRIP OUT OF HOLE LAYING DOWN HWDP F/ 2307' TO SETTING TOOL
	17:30 - 20:00	2.50	TRP	2	TRIP IN HOLE W/ DRILL PIPE FOR COMING OUT LAYING DOWN

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ENSIGN

Spud Date: 8/19/2008

Rig Release: 10/3/2008

Rig Number: 57

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/3/2008	20:00 - 23:00	3.00	TRP	3	TRIP OUT OF HOLE LAYING DOWN THE REST OF THE DRILL PIPE
	23:00 - 03:00	4.00	LOG	4	HOLD SAFETY MEETING W/ CASED HOLE SOLUTIONS & RIG UP / 1ST. RUN GAUGE RING/JUNK BASKET, 2 ND. RUN WEATHERFORD RETREIVABLE BRIDGE PLUG (SET @ 5010')
10/4/2008	03:00 - 06:00	3.00	BOP	1	PULL WEAR RING, & NIPPLE DOWN BOP'S
	06:00 - 10:00	4.00	BOP	1	NIPPLE DOWN BOP'S
	10:00 - 15:00	5.00	LOC	7	CLEAN PITS / RIG DOWN FLOOR EQUIPMENT
	15:00 -		LOC	8	RIG RELEASED @ 15:00 PM ON 10/3/2008

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Operations Summary Report - COMPLETION

Well Name: WRU GB 14G-4-8-22

Spud Date: 8/19/2008

Location: 4- 8-S 22-E 26

Rig Release:

Rig Name: ROCKY MTN WS

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/9/2008	06:00 - 16:00	10.00	BOP	1	Completion On 10-8-08 10:00 AM Move on location and rig up. ND WH and NU BOP's. SWIFN 3:00 PM.
10/10/2008	06:00 - 16:00	10.00	PERF	2	Casing Size: 7" 26# P-110 Completion On 10-9-08 7:00 AM RU wireline, RIH and set 7" RBP @ 2440', dump bail 2 sx of sand on plug. Perf squeeze holes at 2390-92', RD wireline. PU and RIH with 7" CICR and 2 7/8" tubing, set retainer @ 2284'. Open annulus had pump 70 bbls 2% KCL in to squeeze perfs. No circulation or blow on the 7" x 12 1/4" annulus. SDFN 3:00 PM. 24 Hour Forecast: Cement Squeeze 7" x 12 1/4" annulus
10/11/2008	06:00 - 16:00	10.00	PERF	2	Casing Size: 7" 26# P-110 Completion On 10-10-08 7:00 AM Wait on cement crews, SWS cancelled 24 Hour Forecast: Cement Squeeze 7" x 12 1/4" annulus
10/13/2008	06:00 - 16:00	10.00	WOT	1	Casing Size: 7" 26# P-110 Completion On 10-13-08 7:00 AM Wait on cement crews. 24 Hour Forecast: Cement Squeeze 7" x 12 1/4" annulus
10/14/2008	06:00 - 16:00	10.00	WOT	1	Casing Size: 7" 26# P-110 Completion On 10-14-08 7:00 AM Wait on cement crews. 24 Hour Forecast: Cement Squeeze 7" x 12 1/4" annulus
10/15/2008	06:00 - 16:00	10.00	CMT	3	Casing Size: 7" 26# P-110 Completion On 10-15-08 7:00 AM Open well, wait on cement crews. RU ProPetro cement trucks, establish injection rate and pump 375 sx cement into squeeze perfs @ 2390-92'. Displaced cement with 13 bbls water, RD cementers. Unsting from retainer, pull up 9 joints and reverse circulate casing clean with 80 bbls 2% KCL. POOH with 2 7/8" tubing. NOTE: no returns during cement squeeze job. 24 Hour Forecast: Drill out retainer and cement, run CBL to evaluate squeeze job.
10/16/2008	06:00 - 16:00	10.00	SEQ	1	Casing Size: 7" 26# P-110 Completion On 10-16-08 7:00 AM RIH with 6 1/8" bit, bit sub and 70 joints 2 7/8" tubing, tag CICR @ 2284'. RU power swivel and drill on retainer. Drilled up approximately 75% of the retainer, pull up 10' and SDFN 5:00 PM.

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JAN 26 2009

DIV. OF OIL, GAS & MINING

Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ROCKY MTN WS

Spud Date: 8/19/2008

Rig Release:

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/16/2008	06:00 - 16:00	10.00	SEQ	1	24 Hour Forecast: Drill out retainer and cement, run CBL to evaluate squeeze job.
10/17/2008	06:00 - 16:00	10.00	SEQ	1	Casing Size: 7" 26# P-110 Completion On 10-17-08 7:00 AM Finish drilling up CICR, drill up cement from 2286'-2410' and circulate clean. POOH with bit and tubing, RU wireline. Run CBL from 2420 to 1900' with 750 psi on casing. CBL showed top of cement @ 2360'. RIH and perforate squeeze holes from 2350-52', RD wireline. Pump 20 bbls KCL down the casing at 2 BPM and 750 psi, no flow up the annulus. SDFW 5:30PM. 24 Hour Forecast: Unable to get cement until Tuesday, will re-squeeze then.
10/20/2008	06:00 - 16:00	10.00	CMT	3	Casing Size: 7" 26# P-110 Completion On 10/20/08 @ 7:00 AM - RIH w/ 7" CICR & 2-7/8" tbg, set retainer @ 2260'. Pressure test csg & retainer to 750 psi, good test, pump 80 bbls 2% KCL through sqz holes at 2350-52' @ 2 BPM & 300 psi, not returns. Drain lines, SDFN @ 3:00 PM. 24 Hour Forecast: Pump second cmt sqz.
10/21/2008	06:00 - 16:00	10.00	OTH		Casing Size: 7" 26# P-110 Completion On 10/21/08 @ 7:00 AM arrived on location, acid tank was leaking, had to postpone cement squeeze. Crews spent day moving acid from leaking tank. Unable to do any work on the well. On Standby. 24 Hour Forecast: Pump second cmt sqz.
10/22/2008	06:00 - 16:00	10.00	CMT	3	Casing Size: 7" 26# P-110 Completion On 10/21/08 @ 7:00 AM - RU cementers, establish injection rate of 3.4 BPM @ 400 psi. Pump 50 sxs thixotropic cement displace with 13 bbls fresh water. Final rate of 1/2 BPM @ 2200 psi. Unstring from retainer, pull up two stands and reverse circulation clean with 20 bbls 2% KCL. POOH w/ 2-3/8" tbg, lay down stinger, PU 6-1/8" bit. RIH, drill up CICR @ 2260', circulate clean, pull up to 2240'. SDFN @ 5:00 PM. 24 Hour Forecast: Run CBL to determine cement top.
10/23/2008	06:00 - 16:00	10.00	DRL	4	Casing Size: 7" 26# P-110 Completion On 10/23/08 @ 7:00 AM - RU drilling equipment and drill cement from 2262' to 2370', circulate well clean. Waiting on wireline. Drain up. SDFN @ 3:00 PM. 24 Hour Forecast: Run CBL to determine cement top. Casing Size: 7" 26# P-110

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Printed: 10/20/08 4:50 PM

Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ROCKY MTN WS

Spud Date: 8/19/2008

Rig Release:

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/27/2008	06:00 - 16:00	10.00	CMT	3	<p>Completion</p> <p>On 10/24/08 @ 7:00 AM - RU Cutters Wireline & run Cement Bond Log from 2400' - 2000' cement top @ 2330'. Perforate 8 squeeze holes @ 2300-02'. RD Cutters. RU ProPetro cementers and pump 140 sxs Class 'G' cement squeeze w/ 2-7/8" tbg tail @ 2210'. No circ up 7" annulus, pull up to 1570' and circ tbg clean. Shut-in well w/ 800 psi on csg and tbg. Drain up.</p> <p>24 Hour Forecast:</p>
10/28/2008	06:00 - 16:00	10.00	DRL	4	<p>Casing Size: 7" 26# P-110</p> <p>Completion</p> <p>On 10/27/08 @ 7:00 AM - Open well. POOH w/ 24 stand of 2-7/8" tbg. RIH w/ 6-1/8" bit, bit sub & 2-7/8" work string. Tag cmt @ 2225'. Rig up swivel and drill out cmt to 2250', circ out cmt to 2250', circ clean & POOH w/ bit. RU Cutters WL & run Cement Bond Log f/ 2250' - 1800', cmt top @ 2190'. Perforate 7" csg w/ 2' of 4 shots per foot (8 sqz holes), f/ 2155' - 2157'. RD WL. RIH w/ 2-7/8" tbg to 2051'. SWIFN & drain up.</p> <p>24 Hour Forecast: Squeeze cmt to surface.</p>
10/29/2008	06:00 - 16:00	10.00	CMT	3	<p>Casing Size: 7" 26# P-110</p> <p>Completion</p> <p>On 10/28/08 @ 7:00 AM with 2-7/8" tbg tail @ 2051' - RU ProPetro cementers. Sqz perfs @ 2155-57' w/ 300 sxs Class 'G' neat cmt. Circ drilling mud out surface csg while pumping. Pull 10 stands of tbg to 1410'. Reverse circ out tbg 20 bbls KCL water. Held 500 psi back pressure. SWIFN w/ 800 psi on well.</p> <p>24 Hour Forecast: Run CBL.</p>
10/30/2008	06:00 - 16:00	10.00	CMT	3	<p>Casing Size: 7" 26# P-110</p> <p>Completion</p> <p>On 10/29/08 @ 7:00 AM - Open well. RIH f/ 1410' w/ 2-7/8" tbg, tag cmt @ 2041'. POOH w/ 2-7/8" workstring. RU Cutters WL & run CBL f/ 2025' - 1400'. Cement top @ 1600'. Perforate 7" csg w/ 8 sqz holes @ 1510-12'. RD WL. RIH w/ 2-7/8" tbg to 1435' circ 20 bbls KCL water thru perfs up 7" annulus @ 3 BPM & 250 psi. RU ProPetro cementers & pump 250 sxs Class 'G' neat cmt squeeze. Had circ throughout job. Pull up to 800' & reverse circ out tbg w/ 10 bbls KCL water. Pressure well to 400 psi & SWIFN.</p> <p>24 Hour Forecast: Run CBL & determine cement top.</p>
10/31/2008	06:00 - 16:00	10.00	LOG	4	<p>Casing Size: 7" 26# P-110</p> <p>Completion</p> <p>On 10/30/08 @ 7:00 AM - Open well. RIH f/ 800' w/ 2-7/8" tbg, tag cmt @ 1515'. POOH w/ 2-7/8" tbg. RU Cutters WL & run CBL f/ 1490' - 400'. Tagged cmt top in 7" @ 1494'. Cement top in annulus @ 1000', very spotty bond from top to about 750'. Perforate 7" w/ 8 holes @ 900-902'. RD Cutters WL. RIH w/ 13 stands 2-7/8" tbg to 860'. RU ProPetro cementers. Pressured up to 1500 psi on squeeze perfs. No break</p>

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ROCKY MTN WS

Spud Date: 8/19/2008

Rig Release:

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/31/2008	06:00 - 16:00	10.00	LOG	4	<p>or circ up 7" annulus. RD cementers & POOH w/ 13 stands 2-7/8" tbg. SWIFN.</p> <p>24 Hour Forecast: Acidize to get circulation then cement.</p>
11/3/2008	06:00 - 16:00	10.00	STIM	1	<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 10/31/08 @ 7:00 AM - RIH w/ 14 stands of 2-7/8" tbg to 910'. Rig up Superior and spot 600 gals of 15% HCL across perfs @ 900' - 902'. POOH w/ tbg. Pump acid into squeeze perfs @ 1.7 BPM & 1500 psi. No circ up 7" annulus. RD acid crew. RIH w/ 2-7/8" tbg to 1032' & circ up any remaining acid from well. Pull up to 891' & spot 75 sxs Class 'G' cement plug. POOH w/ tbg & displace cmt into perfs @ 900' - 902'. Leave 830 psi on squeeze. SWIFW. Rig down cementers.</p> <p>24 Hour Forecast: Drill out cement.</p>
11/4/2008	06:00 - 16:00	10.00	STIM	1	<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/3/08 @ 7:00 AM - RIH w/ 6-1/8" drag bit & 2-7/8" workstring, tag cement @ 830'. RU Power Swivel and begin drilling. Drill out cement from 830' - 910'; 1480' - 1520' & 2041' - 2250'. Circ csg clean, drain lines. SDFN @ 5:00 PM.</p> <p>24 Hour Forecast: Continue to drill out cement, retrieve RBPs..</p>
11/5/2008	06:00 - 16:00	10.00	DRL	4	<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/4/08 @ 7:00 AM finish drilling out cement from 2250' to 2350'. RIH & tag 7" RBP @ 2440', circ clean, POOH w/ 6-1/8" bit. RIH w/ retrieving tool, circ on to RBP @ 2440'. POOH w/ retrieving tool, did not have RBP. RIH w/ retrieving tool, and attempt to latch on to RBP, no success. Circ out cement & pieces of CICR, POOH w/ tbg & retrieving tool. Drain up, secure well and SDFN @ 5:00 PM.</p> <p>24 Hour Forecast: Retrieve RBP.</p>
11/6/2008	06:00 - 16:00	10.00	DRL	4	<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/5/08 @ 7:00 AM RIH w/ retrieving tool and 2-7/8" workstring, circ over & release RBP @ 2440', POOH. RIH w/ retrieving tool & 2-7/8" workstring, circ out drilling mud, release RBP @ 5010', pull up w/ RBP to 1500', secure well, drain up lines, SDFN @ 5:00 PM.</p> <p>24 Hour Forecast: RIH w/ tbg to TD, acidize.</p>
11/7/2008	06:00 - 16:00	10.00	STIM	1	<p>Casing Size: 7" 26# P-110 Completion</p> <p>On 11/6/08 @ 7:00 AM finish POOH w/ RBP. PU & RIH w/ 2980' 2-3/8" & 2-7/8" workstring. RIH to end of 4-1/2" liner @ 8707'. Pull up to 8560'. RU acid crew, pump 4000 gals 15% HCL, flush w/ 47 bbls 2% KCL. Pull up to 7900', pump 4000 gals 15% HCL, flush w/ 30 bbls 2% KCL & 15 bbls 10# brine. Pull up to 7460', pump 4000 gals 15% HCL, flush w/ 40 bbls 2% KCL, secure well, drain up lines. SDFN.</p> <p>24 Hour Forecast: Finish acid job, lay down workstring. PU & RIH w/ production tbg.</p>

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Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ROCKY MTN WS

Spud Date: 8/19/2008

Rig Release:

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
11/7/2008	06:00 - 16:00	10.00	STIM	1	Casing Size: 7" 26# P-110
11/8/2008	06:00 - 16:00	10.00	STIM	1	Completion On 11/7/08 @ 7:00 AM - 0 psi on tbg & csg, open well, pull up to 7020'. RU acid crew, pump 4000 gals 15% HCL, flush w/ 30 bbls 2% KCL & 10 bbls 10# brine. Pull up to 6560', pump 4000 gals 15% HCL, flush 30 bbls 2% KCL & 10 bbls 10# brine. Pull up to 6030', pump 4000 gals 15% HCL, flush tbg w/ 30 bbls 2% KCL & 10 bbls 10# brine. RD acid crew. POOH w/ workstring, laying down 2-7/8" tbg, 2-3/8" tbg & 3-3/4" bit. SDFN @ 4:00 PM. 24 Hour Forecast: RIH w/ production tbg, swab back acid.
11/11/2008	06:00 - 16:00	10.00	BOP	1	Casing Size: 7" 26# P-110 Completion On 11/10/08 @ 7:00 AM - PU, tally & rabbit in hole w/ 2-7/8" production string. ND BOP's, set anchor, land tbg w/ #12000 tension. NU WH, RU swab equipment. Made 11 swab runs, recovered 57 bbls fluid, no oil. IFL @ 750', FFL @ 950', final Ph 6. SDFN @ 5:00 PM. 24 Hour Forecast: RIH swab back acid, run rods & pump.
11/12/2008	06:00 - 16:00	10.00	SWAB	1	Casing Size: 7" 26# P-110 Completion On 11/11/08 @ 7:00 AM - Swab tbg, made 39 runs & recovered 212 bbls fluid. IFL @ 750'. FFL @ 650'. Final Ph = 4. Started getting oil shows after swabbing back 163 bbls, final oil cut 90+%. RD swab. SDFN @ 4:00 PM. 24 Hour Forecast: Run rods & pump. RDMO.
11/13/2008	06:00 - 16:00	10.00	LOC	4	Casing Size: 7" 26# P-110 Tbg Detail KB 17.0 Streach 1.0 161 Jts 2-7/8" Tbg 5234.59 7" B-2 TAC 2.30 4 jts Boronized 2-7/8" 123.73 PSN 1.10 1 jt 2-7/8" J-55 Tbg 32.97 EOT @ 5412.69 Completion On 11/12/08 @ 7:00 AM 50# on tbg, open well, tbg flowing oil to tank. RU Hot Oiler, flush tbg w/ 75 bbls 2% KCL. PU & bucket test new pump - OK. RIH w/ rods & pump, seat & space out, fill tbg w/ 6 bbls water. Long stroke pump from 0 to 800# in 3 strokes, good test, good pump action. Clamp off rods 12" above tag. RDMO @ 5:00 PM. FINAL REPORT Casing Size: 7" 26# P-110 Tbg Detail KB 17.0 Streach 1.0

CONFIDENTIAL

Operations Summary Report

Well Name: WRU GB 14G-4-8-22

Location: 4- 8-S 22-E 26

Rig Name: ROCKY MTN WS

Spud Date: 8/19/2008

Rig Release:

Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
11/13/2008	06:00 - 16:00	10.00	LOC	4	<div>161 Jts 2-7/8" Tbg 5234.59</div> <div>7" B-2 TAC 2.30</div> <div>4 jts Boronized 2-7/8" 123.73</div> <div>PSN 1.10</div> <div>1 jt 2-7/8" J-55 Tbg 32.97</div> <div>EOT @ 5412.69</div> <div>Rod Detail</div> <div>1 1/2" x 26' Polish Rod</div> <div>1- 2', 1 - 4' x 7/8" Ponys</div> <div>73 - 7/8" Slick</div> <div>136 - 3/4" Slick</div> <div>5 - 3/4" Guided</div> <div>Pump</div> <div>2-1/2" x 1 3/4" x 20 x 23 x 25</div> <div>RHAC #2374</div> <div>Max Stroke 221"</div>

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Revised on 1/29/09

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU-02510A1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: Lateral6. If Indian, Allottee or Tribe Name
N/A7. Unit or CA Agreement Name and No.
WHITE RIVER UNIT2. Name of Operator
Questar Exploration & Production Co.8. Lease Name and Well No.
WRU GB 14G 4 8 22

3. Address 11002 EAST 17500 SOUTH - VERNAL, UT 84078

3a. Phone No. (include area code)
435.781.4342 - Dahn Caldwell9. AFI Well No.
43-047-40097

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface SURFACE - 600' FSL, 2321' FWL, SESW, SEC 4-T8S-R22E

10. Field and Pool or Exploratory
WHITE RIVER11. Sec., T., R., M., on Block and
Survey or Area SURFACE - SEC 4-T8S-R22E
BOTTOM - SEC 9-T8S-R22E

At top prod. interval reported below

At total depth 2617 FNL 1997 FEL
BOTTOM - 1500' FNL, 1750' FEL, SWNE, SEC 9-T8S-R22E

12. County or Parish

UINTAH

13. State

UT

14. Date Spudded
08/19/200815. Date T.D. Reached
09/30/200816. Date Completed 11/14/2008
☐ D & A ☒ Ready to Prod.17. Elevations (DF, RKB, RT, GL)*
5187' KB18. Total Depth: MD 8836'
TVD 5644' 3819. Plug Back T.D.: MD 8707'
TVD 565120. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	9-5/8"	36#		499' GL		310 SXS		SURF - CIRC	
8-3/4"	7"	26#		602'		615 SXS		1000' - LOG	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"								

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) GREEN RIVER			N/A			
B)						
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
SEE ATTACHMENT ONE	SEE ATTACHMENT ONE

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/14/08	11/17/08	24	→	299	0	53			PUMPING
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
N/A	80	80	→					PRODUCING	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

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DIV. OF OIL, GAS & MINING

Revised on 1/29/09

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
UINTA	SURF				
GREEN RIVER	2974'				
G-1 LIME	5978' MD		5694' TVD		

32. Additional remarks (include plugging procedure):

Remedial cement squeeze holes to get behind production csg above the top of the Green River.

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other: ATTACHMENT ONE - ACID REPORT

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) JIM SIMONTON

Title COMPLETION SUPERVISOR

Signature

Jim Simonton (d/c)

Date 01/29/2009

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)

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Revision on
1/29/09

WRU GB 14G 4-8-22 – ATTACHMENT ONE
PERFORATION DETAIL:

<u>Open Perfs</u>	<u>Stimulation</u>					<u>Perf Status</u>
8560' MD	Acidize w/	4,000	Gals	15% HCL		
7960' MD	Acidize w/	4,000	Gals	15% HCL		
7460' MD	Acidize w/	4,000	Gals	15% HCL		
7020' MD	Acidize w/	4,000	Gals	15% HCL		
6560' MD	Acidize w/	4,000	Gals	15% HCL		
6030' MD	Acidize w/	4,000	Gals	15% HCL		

CONFIDENTIAL

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
 CDW

Change of Operator (Well Sold)

X - Operator Name Change

The operator of the well(s) listed below has changed, effective:

6/14/2010

FROM: (Old Operator): N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 308-3048	TO: (New Operator): N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 308-3048
--	---

CA No.

Unit:

WHITE RIVER

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER See attached
2. NAME OF OPERATOR: Questar Exploration and Production Company <i>N5085</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 <i>City</i> Denver <i>State</i> CO <i>Zip</i> 80265		7. UNIT or CA AGREEMENT NAME: See attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached		8. WELL NAME and NUMBER: See attached
PHONE NUMBER: (303) 672-6900		9. API NUMBER: Attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT: See attached
COUNTY: Attached		STATE: UTAH

11 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12 DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024) *N3700*

Utah State Bond Number: ~~965003033~~ *965010695*

Fee Land Bond Number: ~~965003033~~ *965010695*

BIA Bond Number: ~~799446~~ *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) <u>Morgan Anderson</u>	TITLE <u>Regulatory Affairs Analyst</u>
SIGNATURE <i>Morgan Anderson</i>	DATE <u>6/23/2010</u>

(This space for State use only)

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JUN 28 2010

DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

APPROVED *6/13/2009*

Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)
WHITE RIVER
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WR 16-9	09	080S	220E	4304715081	4915	Federal	OW	S	
WRU EIH 15-35-8-22	35	080S	220E	4304733061	12528	Federal	GW	P	
WRU EIH 12W-35-8-22	35	080S	220E	4304733393	12528	Federal	GW	P	
WR 13W-3-8-22	03	080S	220E	4304733651	13544	Federal	GW	P	
OU GB 6W-9-8-22	09	080S	220E	4304734010	13545	Federal	GW	P	
WRU EIH 4W-35-8-22	35	080S	220E	4304734042	12528	Federal	GW	P	
WRU EIH 3W-35-8-22	35	080S	220E	4304734044	12528	Federal	GW	P	
WRU GB 4WRG-9-8-22	09	080S	220E	4304734208	4915	Federal	OW	P	
WRU EIH 13WX-35-8-22	35	080S	220E	4304734210	12528 13456	Federal	GW	P	
WRU EIH 5W-35-8-22	35	080S	220E	4304734572	12528	Federal	GW	P	
OU GB 14W-9-8-22	09	080S	220E	4304734649	13545	Federal	GW	P	
WRU GB 9MU-9-8-22	09	080S	220E	4304734650	13545	Federal	GW	P	
OU GB 10W-9-8-22	09	080S	220E	4304734651	13545	Federal	GW	P	
OU GB 15W-9-8-22	09	080S	220E	4304734678	13545	Federal	GW	P	
OU GB 16W-9-8-22	09	080S	220E	4304734679	13545	Federal	GW	P	
WRU EIH 6W-35-8-22	35	080S	220E	4304734684	12528 16723	Federal	GW	P	
GB 11ML-10-8-22	10	080S	220E	4304734691	14818	Federal	GW	P	
WRU EIH 11W-35-8-22	35	080S	220E	4304734708	12528	Federal	GW	P	
WRU GB 5M-9-8-22	09	080S	220E	4304734753	13545 14447	Federal	GW	S	
OU GB 12W-4-8-22	04	080S	220E	4304734762	13718	Federal	GW	P	
OU GB 12M-10-8-22	10	080S	220E	4304734769	13545	Federal	GW	P	
WRU EIH 14W-26-8-22	26	080S	220E	4304734835	12528	Federal	GW	TA	
WRU EIH 11MU-26-8-22	26	080S	220E	4304734836	12528 13713	Federal	GW	P	
WRU EIH 10W-35-8-22	35	080S	220E	4304735046	12528 15700	Federal	GW	P	
WRU EIH 9MU-26-8-22	26	080S	220E	4304735047	12528 14003	Federal	GW	P	
WRU EIH 15MU-26-8-22	26	080S	220E	4304735048	12528	Federal	GW	P	
WRU EIH 1MU-35-8-22	35	080S	220E	4304735049	12528	Federal	GW	P	
WRU EIH 9M-35-8-22	35	080S	220E	4304735050	12528 14005	Federal	GW	P	
WRU EIH 7MU-35-8-22	35	080S	220E	4304735051	12528 14106	Federal	GW	P	
WRU EIH 1MU-26-8-22	26	080S	220E	4304735118	12528 14349	Federal	GW	P	
WRU EIH 7MU-26-8-22	26	080S	220E	4304735119	12528 14102	Federal	GW	P	
WRU EIH 10MU-26-8-22	26	080S	220E	4304735120	12528 14107	Federal	GW	P	
WRU EIH 15MU-35-8-22	35	080S	220E	4304735121	12528 14197	Federal	GW	P	
WRU EIH 10ML-23-8-22	23	080S	220E	4304735187	12528 14503	Federal	GW	P	
WRU EIH 9ML-23-8-22	23	080S	220E	4304735189	12528 14504	Federal	GW	S	

Bonds: BLM = ESB000024
BIA = 956010693
State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)
 WHITE RIVER
 effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WRU EIH 16MU-26-8-22	26	080S	220E	4304735191	12528 14351	Federal	GW	P	
WRU EIH 2MU-26-8-22	26	080S	220E	4304735192	12528 14104	Federal	GW	P	
WRU EIH 8MU-26-8-22	26	080S	220E	4304735193	12528 14234	Federal	GW	P	
WRU EIH 16MU-35-8-22	35	080S	220E	4304735194	12528 14198	Federal	GW	P	
WRU EIH 8MU-35-8-22	35	080S	220E	4304735195	12528 17329	Federal	GW	P	
WRU EIH 13MU-25-8-22	25	080S	220E	4304735329	12528 14168	Federal	GW	P	
WRU EIH 15ML-23-8-22	23	080S	220E	4304735387	12528 14681	Federal	GW	S	
WRU EIH 4MU-25-8-22	25	080S	220E	4304735388	12528 14339	Federal	GW	P	
WRU EIH 3MU-25-8-22	25	080S	220E	4304735389	12528 14341	Federal	GW	P	
WRU EIH 12ML-24-8-22	24	080S	220E	4304735425	12528 14536	Federal	GW	P	
WRU EIH 14ML-24-8-22	24	080S	220E	4304735426	12528 14646	Federal	GW	P	
WRU EIH 6MU-25-8-22	25	080S	220E	4304735431	12528 14379	Federal	GW	P	
WRU EIH 5MU-25-8-22	25	080S	220E	4304735432	12528 14240	Federal	GW	P	
WRU EIH 12MU-25-8-22	25	080S	220E	4304735601	12528 14214	Federal	GW	P	
WRU EIH 14MU-35-8-22	35	080S	220E	4304735667	12528 14615	Federal	GW	P	
WRU EIH 13ML-24-8-22	24	080S	220E	4304735793	12528 14644	Federal	GW	S	
WRU EIH 16ML-23-8-22	23	080S	220E	4304735804	12528 14683	Federal	GW	P	
WRU EIH 11ML-24-8-22	24	080S	220E	4304735805	12528 14540	Federal	GW	P	
WRU EIH 6B-ML-35-8-22	35	080S	220E	4304737299	12528 15281	Federal	GW	P	
WRU EIH 11BML-35-8-22	35	080S	220E	4304737300	12528 15282	Federal	GW	P	
WRU EIH 3D-ML-35-8-22	35	080S	220E	4304737465	12528 15552	Federal	GW	P	
WRU EIH 7D-ML-35-8-22	35	080S	220E	4304737466	12528 15637	Federal	GW	P	
WRU EIH 4AD-25-8-22	25	080S	220E	4304738636	12528 16651	Federal	GW	P	
WRU EIH 7AD-26-8-22	26	080S	220E	4304738637	12528 16579	Federal	GW	P	
WRU EIH 6DD-35-8-22	35	080S	220E	4304738640	12528 16511	Federal	GW	P	

Bonds: BLM = ESB000024
 BIA = 956010693
 State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)
 WHITE RIVER
 effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WRU EIH 7AD-35-8-22	35	080S	220E	4304738641	16180	Federal	GW	P	
WRU EIH 14BD-35-8-22	35	080S	220E	4304738642	17143	Federal	GW	OPS	C
WRU EIH 9CD-26-8-22	26	080S	220E	4304738649	12528 16446	Federal	GW	P	
GB 1M-4-8-22R (RIGSKID)	04	080S	220E	4304738990	15879	Federal	GW	P	
WRU EIH 6D-5-8-23	05	080S	230E	4304738994	16415	Federal	GW	P	
WRU GB 13G-3-8-22	03	080S	220E	4304739792	4915	Federal	OW	P	
WRU GB 14G-4-8-22	04	080S	220E	4304740097	4915	Federal	OW	P	
GB 3D-4-8-22R(RIGSKID)	04	080S	220E	4304740345	17099	Federal	GW	P	



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:

3100

(UT-922)

JUL 28 2010

Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

Roger L. Bankert

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the ~~Eastern States~~ Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS
UDOGM

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AUG 16 2010

DIV OF OIL, GAS & MIN. (DOW)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
1595 WYNKOOP STREET
DENVER, CO 80202-1129
<http://www.epa.gov/region8>

SEP 14 2011

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Morgan Anderson
QEP Energy Company
Independence Plaza
1050 17th Street, Suite 500
Denver, CO 80265

Accepted by the
Utah Division of
Oil, Gas and Mining

FOR RECORD ONLY

Re: FINAL Permit
EPA UIC Permit UT22201-09086
Well: WRU GB 14G-4-8-22
SESW Sec. 4-T8S-R22E
Uintah County, UT
API No.: 43-047-40097

Ms. Anderson:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Program Permit for the proposed WRU GB 14G-4-8-22 injection well. A Statement of Basis that discusses the conditions and requirements of this Environmental Protection Agency (EPA) UIC Permit, is also included.

The public comment period for this permit ended on AUG 29 2011. No comments on the draft permit were received during the public notice period; therefore the effective date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this final permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the final permit, Part II Section C.1, and obtain written Authorization to Inject from EPA. It is your responsibility to be familiar with and to comply with all provisions of your final permit. The EPA forms referenced in the permit are available at <http://www.epa.gov/safewater/uic/reportingforms.html>. Guidance documents for Cement Bond Logging, Radioactive Tracer Testing, Step Rate Testing, Mechanical Integrity Demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at http://www.epa.gov/region8/water/uic/deep_injection.html. Upon

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SEP 26 2011



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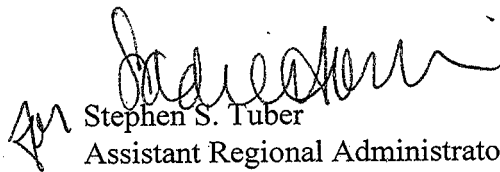
DIV. OF OIL, GAS & MINING

request, hard copies of the EPA forms and guidances can be provided.

This EPA UIC permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed final permit or Statement of Basis, please call Bruce Suchomel of my staff at (303) 312-6001, or toll-free at (800) 227-8917, ext. 312-6001.

Sincerely,



Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit
Statement of Basis

cc: cc letter only:

Uintah & Ouray Business Committee
Irene Cuch, Chairman
Ronald Wopsock, Vice-Chairman
Frances Poowegup, Councilwoman
Phillip Chimburas, Councilman
Stewart Pike, Councilman
Richard Jenks, Jr., Councilman

Daniel Picard
BIA - Uintah & Ouray Indian Agency

cc with enclosures:

Mike Natchees
Environmental Coordinator
Ute Indian Tribe

Manual Myore
Director of Energy & Minerals Dept.
Ute Indian Tribe

Brad Hill
Acting Associate Director
Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office
BLM - Vernal Office

Robin Hansen
Fluid Minerals Engineering Office
BLM - Vernal Office





**UNDERGROUND INJECTION CONTROL PROGRAM
PERMIT**

PREPARED: August 2011

Permit No. UT22201-09086

Class II Enhanced Oil Recovery Injection Well

**WRU GB 14G-4-8-22
Uintah County, UT**

Issued To

QEP Energy Company

11002 East 17500 South

Vernal, UT 84078

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SEP 26 2011
DIV. OF OIL, GAS & MINING

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Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

QEP Energy Company
11002 East 17500 South
Vernal, UT 84078

is authorized to construct and to operate the following Class II injection well or wells:

WRU GB 14G-4-8-22
600' FSL, 2321 FWL, SESW S4, T8S, R22E
Uintah County, UT

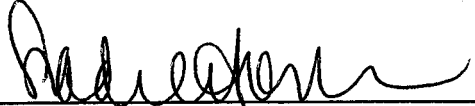
EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR §144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date: SEP 14 2011

Effective Date SEP 14 2011


Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
 - (i) on the injection tubing; and
 - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

1. *Demonstration of Mechanical Integrity (MI).*

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. *Mechanical Integrity Test Methods and Criteria*

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. *Notification Prior to Testing.*

The Permittee shall notify the Director at least seven calendar days prior to any mechanical integrity test unless the mechanical integrity test is conducted after a well construction, well conversion, or a well rework, in which case any prior notice is sufficient. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. *Loss of Mechanical Integrity.*

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
 - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
 - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

3. Injection Pressure Limitation

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permittee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abandonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. Permit Actions.

This Permit may be modified, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

- (a) **Planned changes.** The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) **Anticipated noncompliance.** The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Monitoring Reports.** Monitoring results shall be reported at the intervals specified in this Permit.
- (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) **Twenty-four hour reporting.** The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
 - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
 - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurrence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website <http://www.nrc.uscg.mil/index.htm>.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

- (c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

See diagram.

The WRU GB 14G-4-8-22 enhanced oil recovery injection well is drilled to a Total Measured Depth (TMD) of 8,836', which includes 3,468' of horizontal liner. The production casing is set at 6,023' MD or 5,723' Total Vertical Depth (TVD). The injection zone, including all perforations, is within the horizontal portion of the well.

FORMATION DATA:

- * Base of USDWs: Publication 92 approximates the depth at 900'.
- * Confining Zones:
Douglas Creek Member Upper 5,640' - 5,978' MD, or 5,534' - 5,638' TVD.
- * Permitted Injection Zone:
G1 Lime 6,027' - 8,836' MD, or 5,638' - 5,695' TVD.

WELL CONSTRUCTION:

Surface Casing (9-5/8", 36#K-55) is set to a depth of 499' in a 12-1/4" hole, cemented to the surface using 275 sacks of Class G cement.

Production Casing (7", 26#HCP-110) is set to a depth of 6,023' MD, or 5,723' TVD in an 8-3/4" hole using 615 sacks of Class G cement. The CBL identifies the TOC at 2,420'.

Perforations: The perforations will be entirely within the horizontal portion of this well, between 6,027' and 8,836' MD.

The packer will be set no higher than 100' above the lowermost vertical portion of the wellbore prior to the beginning of the horizontal portion of the well.

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

A successful Radioactive Tracer Survey (RTS) will be considered a valid confirmation that cementing records show adequate cement to prevent the upward migration of injection fluids from the injection zone at injection pressures up to the MAIP, until one of the following events occurs, at which time a subsequent RTS is required:

- (a) If the submitted RTS is determined to be inconclusive or inadequate by EPA.
- (b) If the MAIP of the injection well is exceeded for any reason (it is a violation to exceed the MAIP without prior EPA approval).
- (c) If new injection perforations are added to the injection well, either through the creation of new perforations or the adjustment of the packer depth to inject into a set of existing perforations that were previously inactive.
- (d) If the injection formation is acid-treated, hydraulically stimulated, or stimulated by any other method through the injection well, which may affect the cement integrity of the well.
- (e) If the Director requests that a RTS be run for any reason.

A submitted RTS which indicates the movement of fluid behind casing from the injection zone will result in a requirement to demonstrate Part II Mechanical Integrity using an approved Part II demonstration method such as a temperature log, oxygen activation log, or noise log at a frequency no less than once every five years.

FIELD: Glen Bench

GL: 5171' KBE: 5187'

Start Date: 2/9/10

Finish Date: 2/9/10

WELL NAME: WRU GB 14G-4-8-22

TVD: 5641'

MD: 8836' PBDT: 8707'

Current Well Status: Pumping Oil

Location:
SESW, Section 4, T8S, R22E
Uintah County, Utah

Reason for Pull/Workover:
Pump Change

Wellbore Schematic

Surface Casing

Size 9 5/8"

Weight 36#

Grade K-55

Set @ 499'

Cemented

w/ 275 sxs Premium

Hole Size 12 1/4"

900 Pub. 92

Base USOW

TOC @ 910'

2420

Uinta Formation

Green River Formation- 2980'

3948

Mahogany

Production Casing

Size 7"

Weight 26#

Grade HCP-110

Set @ 6023' MD

5723' TVD

Cemented

W/ 615 sxs

Hole Size 8 3/4"

U Confining Zone 5640'-5978' MD

5534-5638 TVD

Injection Zone 5978'

5638-5695 TVD

6,027 - 8,836 MD

Tubing Landing Detail:

Description	Size	Footage	Depth
KB to Tbg Head		17.00	17.00
Stretch 12000#		1.00	18.00
161 J-55 Tubing	2 7/8"	5234.59	5252.59
B-2 Anchor	7"	2.30	5254.89
4 Jnts Boronized Tbg	2 7/8"	123.73	5378.62
PSN		1.10	5379.72
1 Jnt J-55 Tbg w/ B-N-C	2 7/8"	32.53	5412.25
Barred Notch Collar		0.44	5412.69
EOT			5412.69

TUBING INFORMATION

Condition:

New: ☒ Used: ☐ Rerun: ☐

Grade: J-55 EUE

Weight (#/ft): 6.5#

Sucker Rod Detail:

Size

1 - 1/2" x 26' Polish Rod

1 - 2', 1 - 4' x 7/8" Por

73 - 7/8" Plain

139 - 3/4" Plain

5 - 3/4" Slick

MD = Measured Depth

TVD = True Vertical Depth

Rod Information

Condition:

New: ☐ Used: ☐ Rerun: ☒

Grade:

Manufacture:

Pump Information:

Weatherford

API Designation

2-1/2" X 1-3/4" X 20 X 20 x 20 1/2" RHAC

172" Max Stroke

PUMP SN# ###

ORIGINAL RUN DATE 2/9/2010

RERUN ☐ NEW RUN ☒

Wellhead Detail:

7 1/16" 2000#

7 1/16" 3000# ☒

7 1/16" 5000#

Other: 10"

Hanger: Yes ☐ No ☒

SUMMARY

Acidize horizontal leg with 25,000 gallons 15% HCL

11/9/2009 - Pump Change

2/9/2009 - Pump Change

A-2

WELL NAME: WRU GB 14G-4-8-22

TYPE OF LOG	DATE DUE
Porosity	Prior to receiving authorization to inject.
CBL/VDL/GAMMA RAY	Prior to receiving authorization to inject. If a new CBL is not run through the depth of the vertical portion of the production casing, a RATS must be run through that portion.
RATS	If CBL does not show Part II MI, RATS is req'd prior to authorization to inject (unless a limited authorization to inject is obtained in order to produce a valid test) and at least once every 5 years after the last successful demonstration of Part II MI.
TEMP	Inj. Well: If a new CBL is not run, and the RATS is unsuccessful, must run a Temp Log, Oxygen Activation Log, or Noise Log to determine Part II MI. Conduct Temp Log frequency IAW current guidance.
CBL/VDL/GAMMA RAY	AOR wells, except 19-9. Prior to receiving authorization to inject. If a new CBL is not run through the Lower Confining Zone (CZ), a RATS must be run through the LCZ.
RATS	AOR wells, except 19-9. RATS is req'd prior to authorization to inject (unless a limited authorization to inject is obtained in order to produce a valid test) and at least once every 5 years after the last successful demonstration of Part II MI.
TEMP	AOR wells, except 19-9. If a new CBL is not run, and the RATS is unsuccessful, must run a Temp Log, Oxygen Activation Log, or Noise Log to determine Part II MI. Conduct Temp Log frequency IAW current guidance.

Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: WRU GB 14G-4-8-22

TYPE OF TEST	DATE DUE
Standard Annulus Pressure	Prior to authorization to inject and at least once every five (5) years after the last successful demonstration of Part I Mechanical Integrity.
Pore Pressure	Prior to receiving authorization to inject.
Step Rate Test	Prior to receiving authorization to inject. The SRT shall be performed following current EPA guidance.
Cement Records	Prior to receiving authorization to inject.
Injection Zone Water Sample	Prior to receiving authorization to inject, a representative sample (stabilized specific conductivity from three successive swab runs) from the injection zone will be analyzed for TDS, pH, Specific Gravity and Specific Conductivity.

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
	ZONE 1 (Upper)
WRU GB 14G-4-8-22	1,525

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

The injection interval is in True Vertical Depth (TVD). The Measured Depth (MD) is within the horizontal well portion, and is between 6,027' - 8,836'.

WELL NAME: WRU GB 14G-4-8-22			
FORMATION NAME	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
G1 Lime	5,638.00 - 5,695.00		0.709

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)
ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH
ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and minimum annulus pressure(s) (psig)
	Each month's injected volume (bbl)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

In addition to these items, additional Logging and Testing results may be required periodically. For a list of those items and their due dates, please refer to APPENDIX B - LOGGING AND TESTING REQUIREMENTS.

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs and in accordance with other applicable Federal, State, or local laws or regulations. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs. However, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within 60 days after plugging, the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

PLUG 1: Seal Horizontal portion of Injection Zone: Set a Cast Iron Bridge Plug (CIBP) or a Cast Iron Cement Retainer (CICR) at a depth of 6,050'. Set a Class G cement plug on top to a depth of 5,780'.

PLUG 2: Seal Injection Zone: Set a CIBP or a CICR at a depth of 5,688', which is 50' below the confining zone. (Typically this plug needs to be no more than 50' above the top perforation, but the perforations lie within the horizontal portion of this well.) Set a cement plug of at least 100' on top.

PLUG 3: Seal Mahogany Bench: Set a CIBP or CICR at a depth of 3,998', which is 50' below the top of the Mahogany Bench. Set at least 100' of cement on top.

PLUG 4: Seal Green River: Set a CIBP or a CICR at a depth of 3,030', which is 50' below the top of the Green River Formation. Set at least 100' of cement on top.

PLUG 5: Seal the surface: Place a cement plug across the casing from 50' to surface. Operator may elect to plug from a deeper depth to surface.

Perforate and squeeze cement behind casing from 2,470' up to 450'.

E-2 Attachment Q

FIELD: Glen Bench	GL: 5171' KBE: 5187'	Plugging and Abandonment Plan
WELL NAME: WRU GB 14G-4-8-22	TVD: 5641' MD: 8836' PBTD: 8707'	Current Well Status:
Location: SESW, Section 4, T8S, R22E Uintah County, Utah		

Wellbore Schematic

Surface Casing

Size 9 5/8"
Weight 36#
Grade K-55
Set @ 499'
Cemented
w/ 275 sxs Premium
Hole Size 12 1/4"

Plug 4

Cement Plug from 50' to surface.
operator may elect to plug from a deeper depth to surface.

550'

TOC @ 910'

9 ppg fluid

2930

Plug 3

Plug 3030-2930 with
class G cement
2980 Green River

3030

CIBP or CPCR

9 ppg fluid

3898

Plug 2

3948

3998

plug 3200'
3998'-3898' with
class G cement
Mahogany Bench Top
CIBP or CPCR

9 ppg Fluid

5534

CZ

Plug 2

5638

Production Casing

Size 7"
Weight 26#
Grade HCP-110
Set @ 6023' MD
5723' TVD
Cemented
W/ 615 sxs
Hole Size 8 3/4"

Plug
5688'-5588'
with class G
cement.
5688 CIBP or CPCR

5780'

6050'

4 1/2" 11.6# P-110 5973' - 8707'

CIBP = Cast Iron Bridge Plug
CPCR = Cast Iron Cement Retainer

IZ = Injection Zone
CZ = Confining Zone

SUMMARY

50 sack plug 5780 - 6050

50 sack plug 3230 - 3500

50 sack plug 2530 - 2800

100 sack plug 0 - 550'

IZ

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

No corrective action is deemed necessary for this project. (Unless the logging/testing requirements shown in Appendix B are not met regarding adequate cement for the injector well and the identified AOR wells.)

STATEMENT OF BASIS

QEP ENERGY COMPANY

**WRU GB 14G-4-8-22
UINTAH COUNTY, UT**

EPA PERMIT NO. UT22201-09086

CONTACT: Bruce Suchomel
U. S. Environmental Protection Agency
Ground Water Program, 8P-W-GW
1595 Wynkoop Street
Denver, Colorado 80202-1129
Telephone: 1-800-227-8917 ext. 312-6001

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

PART I. General Information and Description of Facility

QEP Energy Company
11002 East 17500 South
Vernal, UT 84078

on

December 22, 2010

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

WRU GB 14G-4-8-22
600' FSL, 2321 FWL, SESW S4, T8S, R22E
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1		
WELL STATUS / DATE OF OPERATION		
NEW WELLS		
Well Name	Well Status	Date of Operation
WRU GB 14G-4-8-22	New	N/A

PART II. Permit Considerations (40 CFR 146.24)

Hydrogeologic Setting

GREEN RIVER FORMATION

The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite. The Green River interfingers with both the overlying Uinta and the underlying Wasatch Formations, as well as laterally with other formations near the edges of the basin.

The Green River Formation is very low to low permeability except where fractured. Sandstones near oil-shale beds have values of transmissivity from 0.9 to 2.4 sq ft/day. In most of the basin the formation yields only saline or briny water, though in and near the areas of outcrop in the southern part of the basin the water is fresh to slightly saline, and in the area of the outcrop near Strawberry Reservoir the water is fresh where the formation is fractured.

WASATCH FORMATION

In most of the basin, the Wasatch Formation is mainly lacustrine shale, sandstone, and conglomerate. It interfingers with the overlying and underlying formations and laterally with the North Horn, Currant Creek, and Green River Formations. The Wasatch outcrops only in the far eastern end of the northern Uinta Basin and in the canyons of deeply incised streams in the southern Uinta Basin.

The Wasatch Formation is very low to low permeability, except where fractured. In the Greater Altamont-Bluebell oil field, the Wasatch sands reportedly have only 4 to 5 percent porosity, but are permeable because of fracturing. Much of the water produced with petroleum is moderately saline to very saline; generally, however, the water is less mineralized than is water from the Green River Formation.

Geologic Setting (TABLE 2.1)

The well is located in the White River Area in the central portion of the Uinta Basin. The majority of the Basin is located in northeastern Utah, with a small portion in northwest Colorado. The basin is bounded on the north by the east-west-trending Uinta Mountains and the Uinta Basin boundary fault and a gently dipping south flank. The basin was formed in Paleocene to early Eocene time creating a large area of internal drainage which was filled by the ancestral Lake Uinta. The lacustrine, or fresh water lake-formed sediments deposited in and around Lake Uinta make up the Uinta and Green River Formations.

The Uinta Formation generally consists of 5' to 20' thick brown lenticular fluvial sandstone and interbedded varicolored shales. The Uinta is underlain by the Green River Formation which consists of interbedded lake (lacustrine) margin sandstones, limestones and shale beds. The cyclic nature of Green River deposition resulted in numerous stacked deltaic deposits. The Green River Formation is a highly oil-productive formation from which over 500 billion barrels have been produced. Several distinct geologic hydrocarbon productive members within the Green River formation are identified as the Evacuation Creek, Parachute Creek, Garden Gulch, Douglas Creek and Basal Carbonate Members.

TABLE 2.1
GEOLOGIC SETTING
WRU GB 14G-4-8-22

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta fm	0	2,980		sandstone, shale
Green River fm	2,980	6,506		
Evac Ck meb	2,980	3,640	> 10,000	shale, sandstone, dolomite
Birds Nest zone	3,326	3,640	> 10,000	shale, trona nodules
Parachute Ck mbr	3,640	4,944	> 10,000	shale, dolomite, sandstone
Mahogany zone	3,948	4,048		dolomite ("oil shale")
Garden Gulch mbr	4,944	5,534	> 10,000	shale, limestone
Douglas Ck mbr upr	5,534	5,638	> 30,000	shale, sandstone
G1 Lime	5,638	5,695	> 30,000	limestone
Douglas Ck mbr lwr	5,695	5,974	> 30,000	shale, sandstone, limestone
Douglas C mbr trans	5,974	6,506	> 30,000	shale, sandstone
Wasatch fm	6,506	8,707		shale, sandstone

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The Douglas Creek members and the G1 Lime interval shown in the geologic setting, injection zones, and confining zones tables (Tables 2.1, 2.2, and 2.3) are given in True Vertical Depth (TVD).

TABLE 2.2
INJECTION ZONES
WRU GB 14G-4-8-22

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
G1 Lime	5,638	5,695	> 30,000	0.709		N/A

* C - Currently Exempted
E - Previously Exempted
P - Proposed Exemption
N/A - Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

TABLE 2.3
CONFINING ZONES
WRU GB 14G-4-8-22

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Douglas Ck mbr upr	shale, sandstone	5,534	5,638
Douglas Ck mbr lwr	shale, sandstone, limestone	5,712	5,974

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

TABLE 2.4
UNDERGROUND SOURCES OF DRINKING WATER (USDW)
WRU GB 14G-4-8-22

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Sandstone, shale.	0	2,980	< 10,000

PART III. Well Construction (40 CFR 146.22)

TABLE 3.1
WELL CONSTRUCTION REQUIREMENTS
WRU GB 14G-4-8-22

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Surface	12.25	9.63	0 - 499	0 - 499
Longstring	8.75	7.00	0 - 6,023	9105,723
Other	6.13	4.50	6,027 - 8,707	0 -

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The construction plan for the well or wells proposed for conversion to an injection well was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction and conversion details for the well or wells are shown in TABLE 3.1.

The cased interval noted in Table 3.1 is in Measured Depth (MD).

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1
AOR AND CORRECTIVE ACTION

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
GB 6W-9-8-22	Producer	No	8,113	2,320	Unk.
OU GB 10W-9-8-22	Producer	No	7,996	2,190	Unk
WR 14W-4-8-22	Other	Yes	8,150	0	Unk
WR 19-9	Injector	Yes	5,737	3,940	No
WRU GB 9MU-9-8-22	Producer	No	9,820	2,760	Unk

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

The "unknown" under CAP required is due to the need to await the outcome of the testing and logging requirements shown in Appendix B.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

TABLE 4.1 lists the wells in the AOR, and shows the well type, operating status, depth, top of casing cement and whether a CAP is required for this well.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1
INJECTION ZONE PRESSURES
WRU GB 14G-4-8-22

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
G1 Lime	5,638	0.709	1,525

Approved Injection Fluid

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Surety Bond, received April 11, 2003

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0971
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME: WHITE RIVER
2. NAME OF OPERATOR: QEP ENERGY COMPANY		8. WELL NAME and NUMBER: WRU GB 14G-4-8-22
3. ADDRESS OF OPERATOR: 11002 East 17500 South, Vernal, Ut, 84078		9. API NUMBER: 43047400970000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0600 FSL 2321 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 04 Township: 08.0S Range: 22.0E Meridian: S		9. FIELD and POOL or WILDCAT: WHITE RIVER
		COUNTY: UINTAH
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/31/2012	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE WRU GB 14G-4-8-22 WILL BE CONVERTED TO A INJECTION WELL BY THE FOLLOWING PROCEDURE: 1. POOH AND LAYDOWN EXISTING PRODUCTION EQUIPMENT 2. RUN IN HOLE WITH 2 7/8" TUBING AND PACKER 3. SET PACKER AT 5600' +/- (IN VERTICAL SECTION OF HOLE)

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 March 05, 2012

NAME (PLEASE PRINT) Jan Nelson	PHONE NUMBER 435 781-4331	TITLE Permit Agent
SIGNATURE N/A		DATE 2/21/2012

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0971			
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3. ADDRESS OF OPERATOR: 11002 East 17500 South, Vernal, Ut, 84078		9. API NUMBER: 43047400970000			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0600 FSL 2321 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 04 Township: 08.0S Range: 22.0E Meridian: S		9. FIELD and POOL or WILDCAT: WHITE RIVER			
COUNTY: UINTAH		STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION <input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/1/2016 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	TYPE OF ACTION <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. QEP ENERGY COMPANY REQUESTS APPROVAL TO PLUG AND ABANDON THE WRU GB 14G-4-8-22. PLEASE SEE ATTACHED PROCEDURES TO PLUG AND ABANDON. FINAL RECLAMATION OF THIS SITE WILL COMMENCE WITHIN ONE YEAR OF PLUGGING THE WELL.					
Approved by the Utah Division of Oil, Gas and Mining Date: June 06, 2016 By: <u><i>Derek Quist</i></u>					
Please Review Attached Conditions of Approval					
NAME (PLEASE PRINT) Jan Nelson		PHONE NUMBER 435 781-4331			
SIGNATURE N/A		TITLE Permit Agent			
DATE 6/6/2016					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047400970000

CICR for plug #1 should be set as close to TOL and perms as possible -at least to a depth of 5190' as shown in WBD.

P&A Wellbore

Well Name:	WRU GB 14G-4-8-22		AFE:	
Field:	Glen Bench		Well Code:	302827201
Location:	SESW, Section 4, T8S, R22E			
County:	Uintah	State:	Utah	
API:	43-047-40097			
WI:	77.50%			
NRI:	61.86%			

Well Data:	TD:	8,836	PBTD:	8,707
	GL:	5,171	KB:	5,187

Casing & Cementing:

Surface: 12-1/4" Hole Size
9-5/8" 36#, K-55 set @ 499'.
Cement w/ 275 sks

Production: 8 3/4" Hole Size
7", 26#, HCP-110 set @ 6,023'MD 5,723' TVD
Cement w/ 615 sks
TOC @ 910'

Slotted Liner: 6 1/8" Hole Size
4 1/2", 11.6#, P-110 Slotted Liner set @ 5,973'to 8,707'

Perforations: 6023'-8707' Slotted Liner Open

Top of GR @ 2974' Depth to BMSW @ 5,000'

Operation: P&A wellbore

Program:

MIRU service unit, kill well if necessary, ND WH and NU BOP
Release packer and POOH w/ 2-7/8" tubing
PU work string and 7" CICR, RIH and set CICR at 4500' KB
Roll hole with water treated with corrosion inhibitor and biocide
Stab into CICR and pump 150 sacks below, unstab and pump 15 sacks on top
Lay down 8 joints and reverse circulate to clear tubing
Pressure test casing and plug to 1000psi for 15 minutes w/ <10% drop
POOH laying down tubing to ~3025'
Pump a 25 sack balanced plug from 3025'-2925'
Lay down 8 joints and reverse circulate to clear tubing
Tag cement at 2925', POOH w/ tubing
RU wireline, perforate the casing at 550', RD wireline
RD BOP, RU pumping adapter, establish circulation down production casing up surface casing
Circulate ~195 sacks of cement until good cement at surface
Cut off wellhead 3' below ground, top off cement as needed and weld on a 1/4" plate cap w/ weephole
Cap information requirements
QEP Resources
Lease serial number
Well number
Sec. Twnshp, and Range
GPS wellhead location and note on report
Clean up location, RDMO

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0971
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: QEP ENERGY COMPANY		7. UNIT or CA AGREEMENT NAME: WHITE RIVER
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078		8. WELL NAME and NUMBER: WRU GB 14G-4-8-22
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0600 FSL 2321 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 04 Township: 08.0S Range: 22.0E Meridian: S		9. API NUMBER: 43047400970000
9. FIELD and POOL or WILDCAT: WHITE RIVER		COUNTY: UINTAH
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <div style="border: 1px solid black; padding: 2px; display: inline-block;">6/6/2016</div> <input type="checkbox"/> SPUD REPORT Date of Spud:
<input type="checkbox"/> DRILLING REPORT Report Date:	<input checked="" type="checkbox"/> OTHER			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This sundry is to inform you that this well was not converted to a injection well as noted on the notice of intent dated 03/05/2012.

Please cancel this request.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 June 07, 2016

NAME (PLEASE PRINT) Jan Nelson	PHONE NUMBER 435 781-4331	TITLE Permit Agent
SIGNATURE N/A	DATE 6/6/2016	